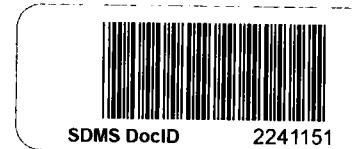


**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011**



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Continuing Calibration Summary

Matrix Spike and Matrix Spike Duplicate Summary & Raw Data

Surrogate Recovery Summary

7. Semi Volatile Organics

Initial Calibration Summary

Continuing Calibration Summary

Matrix Spike and Matrix Spike Duplicate Summary & Raw Data

Surrogate Recovery Summary

**CASE NARRATIVE
Guardian Environmental**

001

Project: 12th Street

**CT&E Number: TA0-K0-P367-001/011
Date Received: 11/11/00**

I certify that this data package is in compliance with the terms and conditions of the contract, both technically and for completeness, for other than the conditions detailed. Release of the data contained in the hard copy data package has been authorized by the Laboratory Manager or designee, as verified by the following signature.

Submitted by,

(b) (4)



Project Manager

CASE NARRATIVE
Guardian Environmental

002

Project: 12th Street

CT&E Number: TA0-K0-P367-001/011
Date Received: 11/11/00

ORIGINATOR

Inorganic Parameters:

Continuing Calibration Verification Standards: The recovery acceptance criteria for the continuing calibration verification standard (80-120%, cyanide >10%) was met, with the exception of the percent recovery for Reactive Cyanide. The Reactive Cyanide sample results were confirmed by Total Cyanide analysis.

Blank: The method blanks meet the established criteria <LOQ (Limit Of Quantitation).

Matrix Spikes: All matrix spikes, matrix spike duplicates, and sample duplicates met acceptance criteria with the exception of the matrix spike percent recovery for Reactive Cyanide.

Metal Parameters:

Initial Calibration Verification Standards: The recovery acceptance criteria was met for all the required elements (90-110%).

Continuing Calibration Verification Standards: The recovery acceptance criteria was met for all required elements (90-110%).

Method Blank: The method blank acceptance criteria (<LOQ) was met for all required elements.

Laboratory control sample (LCS): The recovery acceptance criteria (70-130%) for soils, and (80-120%) for waters, was met for the required elements.

Matrix Spikes: All matrix spikes, matrix spike duplicates, and sample duplicates met acceptance criteria, with the exception of the matrix spike percent recovery and matrix duplicate percent RPD for lead, which failed due to matrix interference.

TCLP Metal Parameters:

Initial Calibration Verification Standards: The recovery acceptance criteria was met for all the required elements (90-110%).

Continuing Calibration Verification Standards: The recovery acceptance criteria was met for all required elements (90-110%).

Method Blank: The method blank acceptance criteria (<LOQ) was met for all required elements.

Laboratory control sample (LCS): The recovery acceptance criteria (70-130%) for soils, and (80-120%) for waters, was met for the required elements.

Leachate Matrix Spikes: All leachate matrix spikes met acceptance criteria, with the exception of the matrix spike percent recovery and matrix duplicate percent RPD for lead, which failed due to matrix interference.

**CASE NARRATIVE
Guardian Environmental**

003

Project: 12th Street

**CT&E Number: TA0-K0-P367-001/011
Date Received: 11/11/00**

Volatiles by 8260 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met. The sixth level of the initial calibration verification performed on 10/06/00 was rejected due to a mechanical error.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Laboratory control sample (LCS): The recovery acceptance criteria (80-120%) was met.

Surrogates : All required surrogates met the acceptable criteria.

Matrix Spike/Matrix Spike Duplicate: The matrix spike/matrix spike duplicate met acceptance criteria.

TCLP Volatiles by 8260 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Laboratory control sample (LCS): The recovery acceptance criteria (80-120%) was met.

Surrogates : All required surrogates met the acceptable criteria.

Leachate Matrix Spikes: All leachate matrix spikes met acceptance criteria.

**CASE NARRATIVE
Guardian Environmental**

004

Project: 12th Street

**CT&E Number: TA0-K0-P367-001/011
Date Received: 11/11/00**

Original

Semi-Volatiles by 8270 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : Surrogates met acceptance criteria.

Matrix Spikes: The matrix spike did not met acceptance criteria, due to probable matrix interference.

TCLP Semi-Volatiles by 8270 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : Surrogates met acceptance criteria, with the exception of the leachate matrix spike of sample D01 which required dilution in order to achieve a response within instrument calibration range. This caused the surrogates to be diluted out.

Leachate Matrix Spikes: All leachate matrix spikes did not met acceptance criteria, due to probable matrix interference.

**CASE NARRATIVE
Guardian Environmental**

005

Project: 12th Street

**CT&E Number: TA0-K0-P367-001/011
Date Received: 11/11/00**

Pesticides by SW 8081 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : All required surrogates met the acceptable criteria.

Matrix Spike/Matrix Spike Duplicate: The matrix spike/matrix spike duplicate met acceptance criteria.

TCLP Pesticides by SW 8081 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : All required surrogates met the acceptable criteria.

Leachate Matrix Spikes: All leachate matrix spikes did not met acceptance criteria, due to probable matrix interference.

**CASE NARRATIVE
Guardian Environmental**

006

Project: 12th Street

**CT&E Number: TA0-K0-P367-001/011
Date Received: 11/11/00**

ORIGINAL

PCB by SW 8082 :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : Surrogates met acceptance criteria, with the exception of the leachate matrix spike of sample D01 which required dilution in order to achieve a response within instrument calibration range. This caused the surrogates to be diluted out.

Matrix Spike/Matrix Spike Duplicate: The matrix spike/matrix spike duplicate met acceptance criteria.

Herbicides by SW 8151A :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : All required surrogates met the acceptable criteria.

TCLP Herbicides by SW 8151A :

Initial and Continuing Verification Standards : All acceptance criteria for initial calibration and continuing calibration were met.

Blanks: All acceptance criteria for the blanks were met <LOQ (Limit Of Quantitation).

Surrogates : All required surrogates met the acceptable criteria.

Leachate Matrix Spikes: All leachate matrix spikes met acceptance criteria.

002953



CT&E Environmental Services Inc.
Laboratory Division

Locations Nationwide
 • Alaska • Louisiana
 • Maryland • Michigan
 • New Jersey • West Virginia
www.cteesi.com

① CLIENT: *Guardian Environmental*
 CONTACT: (b) (4) PHONE NO: (302) 834 1000, ext. 289
 PROJECT: 12th Street SITE: —
 (b) (4)
 FAX NO: (302) 834 0386
 INVOICE TO: (b) (4) P.O. NUMBER:

CT&E Reference:

TAO-KO-P367-118

PAGE 1 OF 1

No. C O N T A I N E R S	SAMPLE TYPE C = COMP G = GRAB	Preservatives Used Analysis Required	TESTS								REMARKS						
			③	Per Contact	TOC	TOT	PCBS	TPH	Full TCLP	DRCRA Metals	8260	8270	Rect 523	C/N	% Moisture	pH	
			(3)	X													
Y3	Sc01	Soil Composite 1	11/9/00	1050	Soil	8	C	X X	>	X X	X X	X X	X X	X X	Trk. Turn around		
4/5	Sc02	Soil Composite 2	11/9/00	1100	Soil	8	C	X	↓	↓	↓	↓	↓	↓	" "	" "	
6/8	D01	ODrum 01	11/9/00	1120	Liquid	1/4	G	X	↓	↓	↓	↓	↓	↓	↓	↓	

LAB NO. SAMPLE IDENTIFICATION DATE TIME MATRIX

Sc01 Soil Composite 1 11/9/00 1050 Soil

Sc02 Soil Composite 2 11/9/00 1100 Soil

D01 ODrum 01 11/9/00 1120 Liquid

⑤ Collected/Relinquished By: (1)

Date: 11/10/00 Time: 12:45
11/10/00 1445 CS

Received By:



Relinquished By: (2)

Date: 11/10/00 Time: 1900
11/10/00 1900 CS

Received By:



Relinquished By: (3)

Date: Time:

Received By:

Relinquished By: (4)

Date: Time:

Received For Laboratory By:



④

Shipping Carrier:

Shipping Ticket No:

Special Deliverable Requirements:

Temperature °C: 4.8

Samples Received Cold? (Circle) YES NO

Chain of Custody Seal: (Circle)

INTACT

BROKEN

ABSENT

Requested Turnaround Time and Special Instructions:

11/27/00

200

Original

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

Mr. Robert Thom
GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-001

Page 1

SC01
 COMPOSITE #1

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type F Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
Extractable Organic Halides (EOX)		ND	U	29	mg/kg	Y SW9023	11/16/00 08:00 PAC	1.0
SILVER	7440-22-4	ND	U	0.86	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
ARSENIC	7440-38-2	30		0.86	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
BARIUM	7440-39-3	150		0.17	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
CADMIUM	7440-43-9	1.5		0.17	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
CHROMIUM	7440-47-3	61		0.86	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
SELENIUM	7782-49-2	1.6		0.86	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
LEAD	7439-92-1	1700		0.86	mg/Kg	Y 6010B	11/28/00 15:12 CBS	1.0
Moisture (Percent)		90		0.010	%	EPA160.3	11/17/00 12:00 MHS	1.0
TOTAL PETROLEUM HYDROCARBONS		470		46	mg/kg	Y EPA418.1	11/27/00 14:00 MF	1.0
Low Temperature Ignition (TOC)		2.8		0.10	%	EPA-600/	11/20/00 12:00 MHS	1.0
Reactivity Characteristic (Cyanide)		ND	U	250	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
Reactivity Characteristic (Sulfide)		ND	U	500	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
pH		7.81			S.U.	SW9045	11/27/00 18:15 TL	1.0
MERCURY, TOTAL	7439-97-6	ND	U	0.11	mg/Kg	Y 7471	11/24/00 13:23 JC2	1.0
AROCLOR-1016	12674-11-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
AROCLOR-1221	11104-28-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
AROCLOR-1232	11141-16-5	ND	U	38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
AROCLOR-1242	53469-21-9	ND	U	38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
AROCLOR-1248	12672-29-6	ND	U	38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
AROCLOR-1254	11097-69-1	ND	U	38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
AROCLOR-1260	11096-82-5	57		38	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
SURROGATE RESULTS								
TETRACHLORO-M-XYLENE	877-09-8	30		3.8	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
TETRACHLORO-M-XYLENE	877-09-8	79			% REC	Y SW8082	11/21/00 13:51 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	39		3.8	ug/Kg	Y SW8082	11/21/00 13:51 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	103			% REC	Y SW8082	11/21/00 13:51 kpp	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

Mr. Robert Thom
GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TA0-K0-P367-001

Page 2

SC01
 COMPOSITE #1

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type F Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
CHLOROMETHANE	74-87-3	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
BROMOMETHANE	74-83-9	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
VINYL CHLORIDE	75-01-4	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
CHLOROETHANE	75-00-3	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
METHYLENE CHLORIDE	75-09-2	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
ACETONE	67-64-1	ND	U	1400	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
CARBON DISULFIDE	75-15-0	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,1-DICHLOROETHENE	75-35-4	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,1-DICHLOROETHANE	75-34-3	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,2-DICHLOROETHENE	540-59-0	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
CHLOROFORM	67-66-3	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,2-DICHLOROETHANE	107-06-2	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
2-BUTANONE	78-93-3	ND	U	720	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,1,1-TRICHLOROETHANE	71-55-6	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
CARBON TETRACHLORIDE	56-23-5	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
BROMODICHLOROMETHANE	75-27-4	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,2-DICHLOROPROPANE	78-87-5	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
CIS-1,3-DICHLOROPROPENE	10061-01-5	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
TRICHLOROETHENE	79-01-6	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
DIBROMOCHLOROMETHANE	124-48-1	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,1,2-TRICHLOROETHANE	79-00-5	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
BENZENE	71-43-2	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
BROMOFORM	75-25-2	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
4-METHYL-2-PENTANONE	108-10-1	ND	U	720	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
2-HEXANONE	591-78-6	ND	U	720	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
TETRACHLOROETHENE	127-18-4	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
TOLUENE	108-88-3	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
CHLOROBENZENE	108-90-7	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
ETHYLBENZENE	100-41-4	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
STYRENE	100-42-5	ND	U	360	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
XYLEMES (TOTAL)	1330-20-7	ND	U	720	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
SURROGATE RESULTS								
TOLUENE-D8	2037-26-5	3700		72	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
TOLUENE-D8	2037-26-5	104			% REC	Y SW8260B	11/13/00 17:39 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	3100		72	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0

Original

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-001

Page 3

SC01
 COMPOSITE #1

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type F Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
4-BROMOFLUOROBENZENE	460-00-4	87			% REC	Y SW8260B	11/13/00 17:39 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	3600		72	ug/Kg	Y SW8260B	11/13/00 17:39 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	100			% REC	Y SW8260B	11/13/00 17:39 pac	1.0
PHENOL	108-95-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BIS(2-CHLOROETHYL)ETHER	111-44-4	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-CHLOROPHENOL	95-57-8	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
1,3-DICHLOROBENZENE	541-73-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
1,4-DICHLOROBENZENE	106-46-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
1,2-DICHLOROBENZENE	95-50-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-METHYLPHENOL	95-48-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
3- & 4-METHYLPHENOL		ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
N-NITROSODI-N-PROPYLAMINE	621-64-7	ND	U	1800	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
HEXACHLOROETHANE	67-72-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
NITROBENZENE	98-95-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
ISOPHORONE	78-59-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-NITROPHENOL	88-75-5	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4-DIMETHYLPHENOL	105-67-9	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4-DICHLOROPHENOL	120-83-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
1,2,4-TRICHLOROBENZENE	120-82-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
NAPHTHALENE	91-20-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
4-CHLORANILINE	106-47-8	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
HEXACHLOROBUTADIENE	87-68-3	ND	U	1800	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
4-CHLORO-3-METHYLPHENOL	59-50-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-METHYLNAPHTHALENE	91-57-6	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4,6-TRICHLOROPHENOL	88-06-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4,5-TRICHLOROPHENOL	95-95-4	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-CHLORONAPHTHALENE	91-58-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-NITROANILINE	88-74-4	ND	U	2100	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
DIMETHYLPHthalate	131-11-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
ACENAPHTHYLENE	208-96-8	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,6-DINITROTOLUENE	606-20-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
3-NITROANILINE	99-09-2	ND	U	2100	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
ACENAPHTHENE	83-32-9	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4-DINITROPHENOL	51-28-5	ND	U	2100	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-001

Page 4

SC01
 COMPOSITE #1

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type F Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
4-NITROPHENOL	100-02-7	ND	U	21000	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
DIBENZOFURAN	132-64-9	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4-DINITROTOLUENE	121-14-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
DIETHYLPHthalATE	84-66-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
4-CHLORODIPHENYLETHER	7005-72-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
FLUORENE	86-73-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
4-NITROANILINE	100-01-6	ND	U	2100	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
4,6-DINITRO-2-METHYLPHENOL	534-52-1	ND	U	2100	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
N-NITROSODIPHENYLAMINE	86-30-6	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
4-BROMOPHENYL PHENYL ETHER	101-55-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
HEXACHLOROBENZENE	118-74-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
PENTACHLOROPHENOL	87-86-5	ND	U	2100	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
PHENANTHRENE	85-01-8	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
ANTHRACENE	120-12-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
DI-N-BUTYLPHthalATE	84-74-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
FLUORANTHENE	206-44-0	480		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
PYRENE	129-00-0	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BUTYL BENZYL PHTHALATE	85-68-7	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
3,3-DICHLOROBENZIDINE	91-94-1	ND	U	830	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZO(A)ANTHRACENE	56-55-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
CHRYSENE	218-01-9	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	1300		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
DI-N-OCTYLPHthalATE	117-84-0	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZO(B)FLUORANTHENE	205-99-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZO(K)FLUORANTHENE	207-08-9	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZO(A)PYRENE	50-32-8	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
INDENO(1,2,3-CD)PYRENE	193-39-5	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
DIBENZO(A,H)ANTHRACENE	53-70-3	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZO(G,H,I)PERYLENE	191-24-2	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZYL ALCOHOL	100-51-6	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BENZOIC ACID	65-85-0	ND	U	1800	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	ND	U	420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
SURROGATE RESULTS								
NITROBENZENE-D5	4165-60-0	1800		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
NITROBENZENE-D5	4165-60-0	48			% REC	Y 8270	11/27/00 16:06 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	1900		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	51			% REC	Y 8270	11/27/00 16:06 tjh	1.0

ORIGINAL

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-001

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SC01

COC 002953

COMPOSITE #1

Date Sampled 11/09/00 10:50

Type F Matrix SOIL

Date Received 11/11/00 09:30

Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
TERPHENYL-D14	1718-51-0	2900		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
TERPHENYL-D14	1718-51-0	78			% REC	Y 8270	11/27/00 16:06 tjh	1.0
PHENOL-D5	4165-62-2	2400		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
PHENOL-D5	4165-62-2	65			% REC	Y 8270	11/27/00 16:06 tjh	1.0
2-FLUOROPHENOL	367-12-4	2000		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2-FLUOROPHENOL	367-12-4	54			% REC	Y 8270	11/27/00 16:06 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	3300		420	ug/Kg	Y 8270	11/27/00 16:06 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	87			% REC	Y 8270	11/27/00 16:06 tjh	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-K0-P367-002

Page 1

SC01
 COMPOSITE #1 LEACHATE

COC 002953

Date Sampled 11/09/00 10:50

Date Received 11/11/00 09:30

Type L Matrix LEACHATE
 Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
2,4-D, TCLP	94-75-7	ND	U	0.010	mg/L	SW8151	11/21/00 20:53 tep	10
2,4,5-TP (SILVEX), TCLP	93-72-1	ND	U	0.010	mg/L	SW8151	11/21/00 20:53 tep	10
SILVER, TCLP	7440-22-4	ND	U	0.020	mg/L	SW6010	11/23/00 02:12 CBS	1.0
ARSENIC, TCLP	7440-38-2	ND	U	0.10	mg/L	SW6010	11/23/00 02:12 CBS	1.0
BARIUM, TCLP	7440-39-3	0.92		0.010	mg/L	SW6010	11/23/00 02:12 CBS	1.0
CADMIUM, TCLP	7440-43-9	0.023		0.020	mg/L	SW6010	11/23/00 02:12 CBS	1.0
CHROMIUM, TCLP	7440-47-3	ND	U	0.050	mg/L	SW6010	11/23/00 02:12 CBS	1.0
SELENIUM, TCLP	7782-49-2	ND	U	0.20	mg/L	SW6010	11/23/00 02:12 CBS	1.0
LEAD, TCLP	7439-92-1	66		0.10	mg/L	SW6010	11/28/00 10:24 CBS	5.0
MERCURY, TCLP	7439-97-6	ND	U	0.0020	mg/L	SW7470	11/21/00 10:35 JC2	1.0
TECHNICAL CHLORDANE, TCLP	57-74-9	ND	U	0.030	mg/L	SW8081	11/22/00 19:15 tep	10
ENDRIN, TCLP	72-20-8	ND	U	0.0060	mg/L	SW8081	11/22/00 19:15 tep	10
HEPTACHLOR, TCLP	76-44-8	ND	U	0.0030	mg/L	SW8081	11/22/00 19:15 tep	10
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	ND	U	0.0030	mg/L	SW8081	11/22/00 19:15 tep	10
GAMMA-BHC, TCLP	58-89-9	ND	U	0.0030	mg/L	SW8081	11/22/00 19:15 tep	10
METHOXYCHLOR, TCLP	72-43-5	ND	U	0.040	mg/L	SW8081	11/22/00 19:15 tep	10
TOXAPHENE, TCLP	8001-35-2	ND	U	0.050	mg/L	SW8081	11/22/00 19:15 tep	10
BENZENE, TCLP	71-43-2	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
CARBON TETRACHLORIDE, TCLP	56-23-5	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
CHLOROBENZENE, TCLP	108-90-7	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
CHLOROFORM, TCLP	67-66-3	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
1,2-DICHLOROETHANE, TCLP	107-06-2	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
1,1-DICHLOROETHENE, TCLP	75-35-4	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
2-BUTANONE, TCLP	78-93-3	ND	U	0.20	mg/L	SW8260	11/14/00 18:37 pac	20
TETRACHLOROETHENE, TCLP	127-18-4	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
TRICHLOROETHENE, TCLP	79-01-6	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
VINYL CHLORIDE, TCLP	75-01-4	ND	U	0.10	mg/L	SW8260	11/14/00 18:37 pac	20
CRESOLS, TOTAL, TCLP		ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0

ORIGINIAL

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-002

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SC01

COC 002953

COMPOSITE #1 LEACHATE

Date Sampled 11/09/00 10:50

Date Received 11/11/00 09:30

Type L Matrix LEACHATE

Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
1,4-DICHLOROBENZENE, TCLP	106-46-7	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
2,4-DINITROTOLUENE, TCLP	121-14-2	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
HEXACHLOROBENZENE, TCLP	118-74-1	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
HEXACHLOROBUTADIENE, TCLP	87-68-3	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
NITROBENZENE, TCLP	98-95-3	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0
PYRIDINE, TCLP	110-86-1	ND	U	0.050	mg/L	SW8270	11/22/00 13:33 ra	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-003

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SC01
 COMPOSITE #1 LEACHATE MATRIX SPIKE
 Type LMS Matrix LEACHATE
 Sampled by CLIENT

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg RLimit	Units	S Method	Date/Time/Anl	DilF
2,4-D, TCLP	94-75-7	0.015	0.010	mg/L	SW8151	11/22/00 00:52 tep	10
2,4-D, TCLP	94-75-7	74		% REC	SW8151	11/22/00 00:52 tep	10
2,4,5-TP (SILVEX), TCLP	93-72-1	0.014	0.010	mg/L	SW8151	11/22/00 00:52 tep	10
2,4,5-TP (SILVEX), TCLP	93-72-1	73		% REC	SW8151	11/22/00 00:52 tep	10
SILVER, TCLP	7440-22-4	2.0	0.020	mg/L	SW6010	11/23/00 02:20 CBS	1.0
SILVER, TCLP	7440-22-4	101		% REC	SW6010	11/23/00 02:20 CBS	1.0
ARSENIC, TCLP	7440-38-2	2.0	0.10	mg/L	SW6010	11/23/00 02:20 CBS	1.0
ARSENIC, TCLP	7440-38-2	100		% REC	SW6010	11/23/00 02:20 CBS	1.0
BARIUM, TCLP	7440-39-3	10	0.010	mg/L	SW6010	11/23/00 02:20 CBS	1.0
BARIUM, TCLP	7440-39-3	105		% REC	SW6010	11/23/00 02:20 CBS	1.0
CADMUM, TCLP	7440-43-9	2.0	0.020	mg/L	SW6010	11/23/00 02:20 CBS	1.0
CADMUM, TCLP	7440-43-9	99		% REC	SW6010	11/23/00 02:20 CBS	1.0
CHROMIUM, TCLP	7440-47-3	2.0	0.050	mg/L	SW6010	11/23/00 02:20 CBS	1.0
CHROMIUM, TCLP	7440-47-3	100		% REC	SW6010	11/23/00 02:20 CBS	1.0
SELENIUM, TCLP	7782-49-2	1.9	0.20	mg/L	SW6010	11/23/00 02:20 CBS	1.0
SELENIUM, TCLP	7782-49-2	94		% REC	SW6010	11/23/00 02:20 CBS	1.0
LEAD, TCLP	7439-92-1	2.0	0.10	mg/L	SW6010	11/28/00 10:32 CBS	5.0
LEAD, TCLP	7439-92-1	102		% REC	SW6010	11/28/00 10:32 CBS	5.0
MERCURY, TCLP	7439-97-6	0.0019	0.0020	mg/L	SW7470	11/21/00 10:37 JC2	1.0
MERCURY, TCLP	7439-97-6	93		% REC	SW7470	11/21/00 10:37 JC2	1.0
TECHNICAL CHLORDANE, TCLP	57-74-9	0.010	0.030	mg/L	SW8081	11/22/00 19:50 tep	10
TECHNICAL CHLORDANE, TCLP	57-74-9	104		% REC	SW8081	11/22/00 19:50 tep	10
ENDRIN, TCLP	72-20-8	0.0050	0.0060	mg/L	SW8081	11/22/00 19:50 tep	10
ENDRIN, TCLP	72-20-8	100		% REC	SW8081	11/22/00 19:50 tep	10
HEPTACHLOR, TCLP	76-44-8	0.0042	0.0030	mg/L	SW8081	11/22/00 19:50 tep	10
HEPTACHLOR, TCLP	76-44-8	85		% REC	SW8081	11/22/00 19:50 tep	10
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	0.0051	0.0030	mg/L	SW8081	11/22/00 19:50 tep	10
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	102		% REC	SW8081	11/22/00 19:50 tep	10
GAMMA-BHC, TCLP	58-89-9	0.0065	0.0030	mg/L	SW8081	11/22/00 19:50 tep	10
GAMMA-BHC, TCLP	58-89-9	129		% REC	SW8081	11/22/00 19:50 tep	10
METHOXYCHLOR, TCLP	72-43-5	0.037	0.040	mg/L	SW8081	11/22/00 19:50 tep	10
METHOXYCHLOR, TCLP	72-43-5	73		% REC	SW8081	11/22/00 19:50 tep	10
TOXAPHENE, TCLP	8001-35-2	0.025	0.050	mg/L	SW8081	11/22/00 19:50 tep	10

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Original

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-003

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SC01
COMPOSITE #1 LEACHATE MATRIX SPIKE

COC 002953
Date Sampled 11/09/00 10:50
Date Received 11/11/00 09:30

Type LMS Matrix LEACHATE
Sampled by CLIENT

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg RLimit	Units	S Method	Date/Time/Anl	DILF
TOXAPHENE, TCLP	8001-35-2	49		% REC	SW8081	11/22/00 19:50 tep	10
BENZENE, TCLP	71-43-2	0.39	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
BENZENE, TCLP	71-43-2	78		% REC	SW8260	11/14/00 19:19 pac	20
CARBON TETRACHLORIDE, TCLP	56-23-5	0.57	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
CARBON TETRACHLORIDE, TCLP	56-23-5	115		% REC	SW8260	11/14/00 19:19 pac	20
CHLOROBENZENE, TCLP	108-90-7	0.42	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
CHLOROBENZENE, TCLP	108-90-7	84		% REC	SW8260	11/14/00 19:19 pac	20
CHLOROFORM, TCLP	67-66-3	0.48	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
CHLOROFORM, TCLP	67-66-3	96		% REC	SW8260	11/14/00 19:19 pac	20
1,2-DICHLOROETHANE, TCLP	107-06-2	0.58	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
1,2-DICHLOROETHANE, TCLP	107-06-2	116		% REC	SW8260	11/14/00 19:19 pac	20
1,1-DICHLOROETHENE, TCLP	75-35-4	0.41	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
1,1-DICHLOROETHENE, TCLP	75-35-4	81		% REC	SW8260	11/14/00 19:19 pac	20
2-BUTANONE, TCLP	78-93-3	0.59	0.20	mg/L	SW8260	11/14/00 19:19 pac	20
2-BUTANONE, TCLP	78-93-3	119		% REC	SW8260	11/14/00 19:19 pac	20
TETRACHLOROETHENE, TCLP	127-18-4	0.61	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
TETRACHLOROETHENE, TCLP	127-18-4	122		% REC	SW8260	11/14/00 19:19 pac	20
TRICHLOROETHENE, TCLP	79-01-6	0.54	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
TRICHLOROETHENE, TCLP	79-01-6	107		% REC	SW8260	11/14/00 19:19 pac	20
VINYL CHLORIDE, TCLP	75-01-4	0.44	0.10	mg/L	SW8260	11/14/00 19:19 pac	20
VINYL CHLORIDE, TCLP	75-01-4	88		% REC	SW8260	11/14/00 19:19 pac	20
CRESOLS, TOTAL, TCLP		0.29	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
CRESOLS, TOTAL, TCLP		17		% REC	SW8270	11/22/00 14:19 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	0.79	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	90		% REC	SW8270	11/22/00 14:19 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	0.63	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	72		% REC	SW8270	11/22/00 14:19 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	0.51	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	58		% REC	SW8270	11/22/00 14:19 ra	1.0
1,4-DICHLOROBENZENE, TCLP	106-46-7	0.38	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
1,4-DICHLOROBENZENE, TCLP	106-46-7	44		% REC	SW8270	11/22/00 14:19 ra	1.0
2,4-DINITROTOLUENE, TCLP	121-14-2	0.066	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
2,4-DINITROTOLUENE, TCLP	121-14-2	44		% REC	SW8270	11/22/00 14:19 ra	1.0
HEXACHLOROBENZENE, TCLP	118-74-1	0.078	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
HEXACHLOROBENZENE, TCLP	118-74-1	52		% REC	SW8270	11/22/00 14:19 ra	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TA0-K0-P367-003

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SC01
 COMPOSITE #1 LEACHATE MATRIX SPIKE
 Type LMS Matrix LEACHATE
 Sampled by CLIENT

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

% Solids 87

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg RLimit	Units	S Method	Date/Time/Anl	DilF
HEXACHLOROBUTADIENE, TCLP	87-68-3	0.24	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
HEXACHLOROBUTADIENE, TCLP	87-68-3	49		% REC	SW8270	11/22/00 14:19 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	0.38	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	43		% REC	SW8270	11/22/00 14:19 ra	1.0
NITROBENZENE, TCLP	98-95-3	0.53	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
NITROBENZENE, TCLP	98-95-3	60		% REC	SW8270	11/22/00 14:19 ra	1.0
PYRIDINE, TCLP	110-86-1	0.34	0.050	mg/L	SW8270	11/22/00 14:19 ra	1.0
PYRIDINE, TCLP	110-86-1	39		% REC	SW8270	11/22/00 14:19 ra	1.0

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CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-K0-P367-004

Page 1

SC02
COMPOSITE #2

COC 002953

Date Sampled 11/09/00 11:00

Date Received 11/11/00 09:30

Type F Matrix SOIL
Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
Extractable Organic Halides (EOX)		ND	U	28	mg/kg	Y SW9023	11/16/00 08:00 PAC	1.0
SILVER	7440-22-4	ND	U	0.84	mg/Kg	Y 6010B	11/28/00 15:20 CBS	1.0
ARSENIC	7440-38-2	17		0.84	mg/Kg	Y 6010B	11/28/00 15:20 CBS	1.0
BARIUM	7440-39-3	120		0.17	mg/Kg	Y 6010B	11/28/00 15:20 CBS	1.0
CADMIUM	7440-43-9	1.1		0.17	mg/Kg	Y 6010B	11/28/00 15:20 CBS	1.0
CHROMIUM	7440-47-3	52		0.84	mg/Kg	Y 6010B	11/28/00 15:20 CBS	1.0
SELENIUM	7782-49-2	ND	U	0.84	mg/Kg	Y 6010B	11/28/00 15:20 CBS	1.0
LEAD	7439-92-1	56		5.6	mg/Kg	Y 6010B	11/29/00 04:31 JWJ	5.0
Moisture (Percent)		90		0.010	%	EPA160.3	11/17/00 12:00 MHS	1.0
TOTAL PETROLEUM HYDROCARBONS		600		45	mg/kg	Y EPA418.1	11/27/00 14:00 MF	1.0
Low Temperature Ignition (TOC)		2.2		0.10	%	EPA-600/	11/20/00 12:00 MHS	1.0
Reactivity Characteristic (Cyanide)		ND	U	250	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
Reactivity Characteristic (Sulfide)		ND	U	500	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
pH		7.77			S.U.	SW9045	11/27/00 18:15 TL	1.0
MERCURY, TOTAL	7439-97-6	0.12		0.11	mg/Kg	Y 7471	11/24/00 13:25 JC2	1.0
AROCLOR-1016	12674-11-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
AROCLOR-1221	11104-28-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
AROCLOR-1232	11141-16-5	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
AROCLOR-1242	53469-21-9	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
AROCLOR-1248	12672-29-6	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
AROCLOR-1254	11097-69-1	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
AROCLOR-1260	11096-82-5	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
SURROGATE RESULTS								
TETRACHLORO-M-XYLENE	877-09-8	33		3.8	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
TETRACHLORO-M-XYLENE	877-09-8	88		% REC	Y SW8082	11/21/00 14:08 kpp	1.0	
DECACHLOROBIPHENYL	2051-24-3	36		3.8	ug/Kg	Y SW8082	11/21/00 14:08 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	95		% REC	Y SW8082	11/21/00 14:08 kpp	1.0	

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-004

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SC02
 COMPOSITE #2

COC 002953
 Date Sampled 11/09/00 11:00
 Date Received 11/11/00 09:30

Type F Matrix SOIL
 Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
CHLOROMETHANE	74-87-3	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
BROMOMETHANE	74-83-9	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
VINYL CHLORIDE	75-01-4	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
CHLOROETHANE	75-00-3	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
METHYLENE CHLORIDE	75-09-2	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
ACETONE	67-64-1	ND	U	1400	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
CARBON DISULFIDE	75-15-0	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,1-DICHLOROETHENE	75-35-4	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,1-DICHLOROETHANE	75-34-3	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,2-DICHLOROETHENE	540-59-0	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
CHLOROFORM	67-66-3	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,2-DICHLOROETHANE	107-06-2	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
2-BUTANONE	78-93-3	ND	U	700	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,1,1-TRICHLOROETHANE	71-55-6	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
CARBON TETRACHLORIDE	56-23-5	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
BROMODICHLOROMETHANE	75-27-4	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,2-DICHLOROPROPANE	78-87-5	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
CIS-1,3-DICHLOROPROPENE	10061-01-5	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
TRICHLOROETHENE	79-01-6	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
DIBROMOCHLOROMETHANE	124-48-1	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,1,2-TRICHLOROETHANE	79-00-5	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
BENZENE	71-43-2	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
BROMOFORM	75-25-2	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
4-METHYL-2-PENTANONE	108-10-1	ND	U	700	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
2-HEXANONE	591-78-6	ND	U	700	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
TETRACHLOROETHENE	127-18-4	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
TOLUENE	108-88-3	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
CHLOROBENZENE	108-90-7	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
ETHYLBENZENE	100-41-4	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
STYRENE	100-42-5	ND	U	350	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
XYLENES (TOTAL)	1330-20-7	ND	U	700	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
SURROGATE RESULTS								
TOLUENE-D8	2037-26-5	3800		70	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
TOLUENE-D8	2037-26-5	108		% REC	Y SW8260B	11/13/00 18:20 pac	1.0	
4-BROMOFLUOROBENZENE	460-00-4	2900		70	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0

Q.C. Sampled

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-004

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SC02
COMPOSITE #2COC 002953
Date Sampled 11/09/00 11:00
Date Received 11/11/00 09:30Type F Matrix SOIL
Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
4-BROMOFLUOROBENZENE	460-00-4	83			% REC	Y SW8260B	11/13/00 18:20 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	3400		70	ug/Kg	Y SW8260B	11/13/00 18:20 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	98			% REC	Y SW8260B	11/13/00 18:20 pac	1.0
PHENOL	108-95-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BIS(2-CHLOROETHYL)ETHER	111-44-4	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-CHLOROPHENOL	95-57-8	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
1,3-DICHLOROBENZENE	541-73-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
1,4-DICHLOROBENZENE	106-46-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
1,2-DICHLOROBENZENE	95-50-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-METHYLPHENOL	95-48-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
3- & 4-METHYLPHENOL		ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
N-NITROSODI-N-PROPYLAMINE	621-64-7	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
HEXACHLOROETHANE	67-72-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
NITROBENZENE	98-95-3	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
ISOPHORONE	78-59-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-NITROPHENOL	88-75-5	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4-DIMETHYLPHENOL	105-67-9	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4-DICHLOROPHENOL	120-83-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
1,2,4-TRICHLOROBENZENE	120-82-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
NAPHTHALENE	91-20-3	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
4-CHLOROANILINE	106-47-8	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
HEXACHLOROBUTADIENE	87-68-3	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
4-CHLORO-3-METHYLPHENOL	59-50-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-METHYLNAPHTHALENE	91-57-6	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4,6-TRICHLOROPHENOL	88-06-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4,5-TRICHLOROPHENOL	95-95-4	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-CHLORONAPHTHALENE	91-58-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-NITROANILINE	88-74-4	ND	U	2100	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
DIMETHYLPHthalate	131-11-3	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
ACENAPHTHYLENE	208-96-8	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,6-DINITROTOLUENE	606-20-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
3-NITROANILINE	99-09-2	ND	U	2100	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
ACENAPTHENE	83-32-9	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4-DINITROPHENOL	51-28-5	ND	U	2100	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-004

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SC02
 COMPOSITE #2

COC 002953
 Date Sampled 11/09/00 11:00
 Date Received 11/11/00 09:30

Type F Matrix SOIL
 Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
4-NITROPHENOL	100-02-7	ND	U	21000	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
DIBENZOFURAN	132-64-9	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4-DINITROTOLUENE	121-14-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
DIETHYLPHthalATE	84-66-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
4-CHLORODIPHENYLETHER	7005-72-3	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
FLUORENE	86-73-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
4-NITROANILINE	100-01-6	ND	U	2100	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
4,6-DINITRO-2-METHYLPHENOL	534-52-1	ND	U	2100	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
N-NITROSODIPHENYLAMINE	86-30-6	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
4-BROMOPHENYL PHENYL ETHER	101-55-3	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
HEXACHLOROBENZENE	118-74-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
PENTACHLOROPHENOL	87-86-5	ND	U	2100	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
PHENANTHRENE	85-01-8	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
ANTHRACENE	120-12-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
DI-N-BUTYLPHthalATE	84-74-2	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
FLUORANTHENE	206-44-0	760		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
PYRENE	129-00-0	740		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BUTYL BENZYL PHTHALATE	85-68-7	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
3,3-DICHLOROBENZIDINE	91-94-1	ND	U	820	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZO(A)ANTHRACENE	56-55-3	520		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
CHRYSENE	218-01-9	640		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	1700		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
DI-N-OCTYLPHthalATE	117-84-0	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZO(B)FLUORANTHENE	205-99-2	460		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZO(K)FLUORANTHENE	207-08-9	540		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZO(A)PYRENE	50-32-8	480		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
INDENO(1,2,3-CD)PYRENE	193-39-5	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
DIBENZO(A,H)ANTHRACENE	53-70-3	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZO(G,H,I)PERYLENE	191-24-2	440		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZYL ALCOHOL	100-51-6	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BENZOIC ACID	65-85-0	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	ND	U	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
SURROGATE RESULTS								
NITROBENZENE-D5	4165-60-0	2200		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
NITROBENZENE-D5	4165-60-0	59		% REC	Y 8270	11/27/00 17:01 tjh	1.0	
2-FLUOROBIPHENYL	321-60-8	2100		410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	56		% REC	Y 8270	11/27/00 17:01 tjh	1.0	

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CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-010

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SC01

COMPOSITE #1 MATRIX SPIKE DUP

COC 002953

Date Sampled 11/09/00 10:50

Date Received 11/11/00 09:30

Type MSD Matrix SOIL

Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
2-FLUOROPHENOL	367-12-4	3400		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-FLUOROPHENOL	367-12-4	91			% REC	Y 8270	11/27/00 18:49 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	4100		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	108			% REC	Y 8270	11/27/00 18:49 tjh	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-010

Page 4

SC01
 COMPOSITE #1 MATRIX SPIKE DUP

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type MSD Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
4-NITROANILINE	100-01-6	ND	U	2400	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4,6-DINITRO-2-METHYLPHENOL	534-52-1	ND	U	2400	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
N-NITROSODIPHENYLAMINE	86-30-6	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-BROMOPHENYL PHENYL ETHER	101-55-3	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
HEXACHLOROBENZENE	118-74-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
PENTACHLOROPHENOL	87-86-5	3600		2400	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
PENTACHLOROPHENOL	87-86-5	96			% REC	Y 8270	11/27/00 18:49 tjh	1.0
PHENANTHRENE	85-01-8	3900		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
ANTHRACENE	120-12-7	1000		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
DI-N-BUTYLPHthalATE	84-74-2	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
FLUORANTHENE	206-44-0	3500		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
PYRENE	129-00-0	3500		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
PYRENE	129-00-0	184	*		% REC	Y 8270	11/27/00 18:49 tjh	1.0
BUTYL BENZYL PHTHALATE	85-68-7	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
3,3-DICHLOROBENZIDINE	91-94-1	ND	U	940	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZO(A)ANTHRACENE	56-55-3	1500		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
CHRYSENE	218-01-9	1500		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	1100		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
DI-N-OCTYLPHthalATE	117-84-0	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZO(B)FLUORANTHENE	205-99-2	1100		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZO(K)FLUORANTHENE	207-08-9	1000		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZO(A)PYRENE	50-32-8	1000		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
INDENO(1,2,3-CD)PYRENE	193-39-5	760		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
DIBENZO(A,H)ANTHRACENE	53-70-3	470		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZO(G,H,I)PERYLENE	191-24-2	870		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZYL ALCOHOL	100-51-6	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BENZOIC ACID	65-85-0	ND	U	1800	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
SURROGATE RESULTS								
NITROBENZENE-D5	4165-60-0	3200		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
NITROBENZENE-D5	4165-60-0	84			% REC	Y 8270	11/27/00 18:49 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	2600		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	68			% REC	Y 8270	11/27/00 18:49 tjh	1.0
TERPHENYL-D14	1718-51-0	3700		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
TERPHENYL-D14	1718-51-0	97			% REC	Y 8270	11/27/00 18:49 tjh	1.0
PHENOL-D5	4165-62-2	4100		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
PHENOL-D5	4165-62-2	108			% REC	Y 8270	11/27/00 18:49 tjh	1.0

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CT&E Environmental Services Inc.
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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-010

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SC01

COC 002953

COMPOSITE #1 MATRIX SPIKE DUP

Date Sampled 11/09/00 10:50

Date Received 11/11/00 09:30

Type MSD Matrix SOIL

Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
N-NITROSODI-N-PROPYLAMINE	621-64-7	1800		1800	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
N-NITROSODI-N-PROPYLAMINE	621-64-7	93			% REC	Y 8270	11/27/00 18:49 tjh	1.0
HEXACHLOROETHANE	67-72-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
NITROBENZENE	98-95-3	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
ISOPHORONE	78-59-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-NITROPHENOL	88-75-5	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4-DIMETHYLPHENOL	105-67-9	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4-DICHLOROPHENOL	120-83-2	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
1,2,4-TRICHLOROBENZENE	120-82-1	1300		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
1,2,4-TRICHLOROBENZENE	120-82-1	70			% REC	Y 8270	11/27/00 18:49 tjh	1.0
NAPHTHALENE	91-20-3	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-CHLOROANILINE	106-47-8	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
HEXACHLOROBUTADIENE	87-68-3	ND	U	1800	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-CHLORO-3-METHYLPHENOL	59-50-7	3200		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-CHLORO-3-METHYLPHENOL	59-50-7	84			% REC	Y 8270	11/27/00 18:49 tjh	1.0
2-METHYLNAPHTHALENE	91-57-6	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4,6-TRICHLOROPHENOL	88-06-2	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4,5-TRICHLOROPHENOL	95-95-4	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-CHLORONAPHTHALENE	91-58-7	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-NITROANILINE	88-74-4	ND	U	2400	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
DIMETHYLPHthalate	131-11-3	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
ACENAPHTHYLENE	208-96-8	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,6-DINITROTOLUENE	606-20-2	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
3-NITROANILINE	99-09-2	ND	U	2400	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
ACENAPHTHENE	83-32-9	2000		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
ACENAPHTHENE	83-32-9	107			% REC	Y 8270	11/27/00 18:49 tjh	1.0
2,4-DINITROPHENOL	51-28-5	ND	U	2400	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-NITROPHENOL	100-02-7	3900		24000	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-NITROPHENOL	100-02-7	104			% REC	Y 8270	11/27/00 18:49 tjh	1.0
DIBENZOFURAN	132-64-9	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4-DINITROTOLUENE	121-14-2	1200		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2,4-DINITROTOLUENE	121-14-2	63			% REC	Y 8270	11/27/00 18:49 tjh	1.0
DIETHYLPHthalate	84-66-2	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
4-CHLORODIPHENYLETHER	7005-72-3	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
FLUORENE	86-73-7	630		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-010

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SC01
 COMPOSITE #1 MATRIX SPIKE DUP

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type MSD Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
TRICHLOROETHENE	79-01-6	111			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
DIBROMOCHLOROMETHANE	124-48-1	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,1,2-TRICHLOROETHANE	79-00-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
BENZENE	71-43-2	1600		360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
BENZENE	71-43-2	91			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
BROMOFORM	75-25-2	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
4-METHYL-2-PENTANONE	108-10-1	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
2-HEXANONE	591-78-6	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
TETRACHLOROETHENE	127-18-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
TOLUENE	108-88-3	1900		360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
TOLUENE	108-88-3	108			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
CHLOROBENZENE	108-90-7	1600		360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
CHLOROBENZENE	108-90-7	90			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
ETHYLBENZENE	100-41-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
STYRENE	100-42-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
XYLENES (TOTAL)	1330-20-7	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
SURROGATE RESULTS								
TOLUENE-D8	2037-26-5	3300		72	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
TOLUENE-D8	2037-26-5	92			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	3500		72	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	99			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	4100		72	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	115			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
PHENOL	108-95-2	3600		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
PHENOL	108-95-2	96	*		% REC	Y 8270	11/27/00 18:49 tjh	1.0
BIS(2-CHLOROETHYL)ETHER	111-44-4	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-CHLOROPHENOL	95-57-8	3300		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-CHLOROPHENOL	95-57-8	88			% REC	Y 8270	11/27/00 18:49 tjh	1.0
1,3-DICHLOROBENZENE	541-73-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
1,4-DICHLOROBENZENE	106-46-7	1400		470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
1,4-DICHLOROBENZENE	106-46-7	74			% REC	Y 8270	11/27/00 18:49 tjh	1.0
1,2-DICHLOROBENZENE	95-50-1	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
2-METHYLPHENOL	95-48-7	ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0
3- & 4-METHYLPHENOL		ND	U	470	ug/Kg	Y 8270	11/27/00 18:49 tjh	1.0

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CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-010

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SC01

COMPOSITE #1 MATRIX SPIKE DUP

COC 002953

Date Sampled 11/09/00 10:50

Date Received 11/11/00 09:30

Type MSD Matrix SOIL

Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
Extractable Organic Halides (EOX)		150		29	mg/kg	Y SW9023	11/16/00 08:00 PAC	1.0
Extractable Organic Halides (EOX)		105			% REC	Y SW9023	11/16/00 08:00 PAC	1.0
AROCLOR-1016	12674-11-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1221	11104-28-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1232	11141-16-5	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1242	53469-21-9	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1248	12672-29-6	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1254	11097-69-1	130		38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1254	11097-69-1	66			% REC	Y SW8082	11/21/00 14:41 kpp	1.0
AROCLOR-1260	11096-82-5	42		38	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
SURROGATE RESULTS								
TETRACHLORO-M-XYLENE	877-09-8	30		3.8	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
TETRACHLORO-M-XYLENE	877-09-8	78			% REC	Y SW8082	11/21/00 14:41 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	36		3.8	ug/Kg	Y SW8082	11/21/00 14:41 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	95			% REC	Y SW8082	11/21/00 14:41 kpp	1.0
CHLOROMETHANE	74-87-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
BROMOMETHANE	74-83-9	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
VINYL CHLORIDE	75-01-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
CHLOROETHANE	75-00-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
METHYLENE CHLORIDE	75-09-2	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
ACETONE	67-64-1	ND	U	1400	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
CARBON DISULFIDE	75-15-0	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,1-DICHLOROETHENE	75-35-4	1900		360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,1-DICHLOROETHENE	75-35-4	106			% REC	Y SW8260B	11/17/00 12:53 pac	1.0
1,1-DICHLOROETHANE	75-34-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,2-DICHLOROETHENE	540-59-0	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
CHLOROFORM	67-66-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,2-DICHLOROETHANE	107-06-2	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
2-BUTANONE	78-93-3	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,1,1-TRICHLOROETHANE	71-55-6	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
CARBON TETRACHLORIDE	56-23-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
BROMODICHLOROMETHANE	75-27-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
1,2-DICHLOROPROPANE	78-87-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
CIS-1,3-DICHLOROPROPENE	10061-01-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0
TRICHLOROETHENE	79-01-6	2000		360	ug/Kg	Y SW8260B	11/17/00 12:53 pac	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-009

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SC01
 COMPOSITE #1 MATRIX SPIKE

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type MS Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
DI-N-BUTYLPHthalATE	84-74-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
FLUORANTHENE	206-44-0	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
PYRENE	129-00-0	1800		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
PYRENE	129-00-0	95			% REC	Y 8270	11/27/00 17:55 tjh	1.0
BUTYL BENZYL PHthalATE	85-68-7	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
3,3-DICHLOROBENZIDINE	91-94-1	ND	U	760	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZO(A)ANTHRACENE	56-55-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
CHRYSENE	218-01-9	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	1100		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
DI-N-OCTYLPHthalATE	117-84-0	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZO(B)FLUORANTHENE	205-99-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZO(K)FLUORANTHENE	207-08-9	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZO(A)PYRENE	50-32-8	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
INDENO(1,2,3-CD)PYRENE	193-39-5	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
DIBENZO(A,H)ANTHRACENE	53-70-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZO(G,H,I)PERYLENE	191-24-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZYL ALCOHOL	100-51-6	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BENZOIC ACID	65-85-0	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
SURROGATE RESULTS								
NITROBENZENE-D5	4165-60-0	1900		370	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
NITROBENZENE-D5	4165-60-0	50			% REC	Y 8270	11/27/00 17:55 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	1800		370	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-FLUOROBIPHENYL	321-60-8	47			% REC	Y 8270	11/27/00 17:55 tjh	1.0
TERPHENYL-D14	1718-51-0	3000		370	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
TERPHENYL-D14	1718-51-0	81			% REC	Y 8270	11/27/00 17:55 tjh	1.0
PHENOL-D5	4165-62-2	2500		370	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
PHENOL-D5	4165-62-2	67			% REC	Y 8270	11/27/00 17:55 tjh	1.0
2-FLUOROPHENOL	367-12-4	1700		370	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-FLUOROPHENOL	367-12-4	46			% REC	Y 8270	11/27/00 17:55 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	3200		370	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	86			% REC	Y 8270	11/27/00 17:55 tjh	1.0

Original

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-009

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SC01
 COMPOSITE #1 MATRIX SPIKE
 Type MS Matrix SOIL
 Sampled by CLIENT

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

% Solids 87 120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
1,2,4-TRICHLOROBENZENE	120-82-1	980		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
1,2,4-TRICHLOROBENZENE	120-82-1	53			% REC	Y 8270	11/27/00 17:55 tjh	1.0
NAPHTHALENE	91-20-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-CHLOROANILINE	106-47-8	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
HEXACHLOROBUTADIENE	87-68-3	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-CHLORO-3-METHYLPHENOL	59-50-7	2600		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-CHLORO-3-METHYLPHENOL	59-50-7	69			% REC	Y 8270	11/27/00 17:55 tjh	1.0
2-METHYLNAPHTHALENE	91-57-6	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4,6-TRICHLOROPHENOL	88-06-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4,5-TRICHLOROPHENOL	95-95-4	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-CHLORONAPHTHALENE	91-58-7	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-NITROANILINE	88-74-4	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
DIMETHYLPHthalate	131-11-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
ACENAPHTHYLENE	208-96-8	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,6-DINITROTOLUENE	606-20-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
3-NITROANILINE	99-09-2	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
ACENAPTHENE	83-32-9	1200		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
ACENAPTHENE	83-32-9	64			% REC	Y 8270	11/27/00 17:55 tjh	1.0
2,4-DINITROPHENOL	51-28-5	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-NITROPHENOL	100-02-7	2900		19000	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-NITROPHENOL	100-02-7	79			% REC	Y 8270	11/27/00 17:55 tjh	1.0
DIBENZOFURAN	132-64-9	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4-DINITROTOLUENE	121-14-2	1100		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4-DINITROTOLUENE	121-14-2	60			% REC	Y 8270	11/27/00 17:55 tjh	1.0
DIETHYLPHthalate	84-66-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-CHLORODIPHENYLETHER	7005-72-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
FLUORENE	86-73-7	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-NITROANILINE	100-01-6	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4,6-DINITRO-2-METHYLPHENOL	534-52-1	ND	U	1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
N-NITROSODIPHENYLAMINE	86-30-6	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
4-BROMOPHENYL PHENYL ETHER	101-55-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
HEXACHLOROBENZENE	118-74-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
PENTACHLOROPHENOL	87-86-5	3500		1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
PENTACHLOROPHENOL	87-86-5	94			% REC	Y 8270	11/27/00 17:55 tjh	1.0
PHENANTHRENE	85-01-8	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
ANTHRACENE	120-12-7	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-009

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SC01
 COMPOSITE #1 MATRIX SPIKE

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

Type MS Matrix SOIL
 Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
TETRACHLOROETHENE	127-18-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
TOLUENE	108-88-3	1800		360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
TOLUENE	108-88-3	100			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
CHLOROBENZENE	108-90-7	1600		360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
CHLOROBENZENE	108-90-7	92			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
ETHYLBENZENE	100-41-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
STYRENE	100-42-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
XYLENES (TOTAL)	1330-20-7	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
SURROGATE RESULTS								
TOLUENE-D8	2037-26-5	3200		72	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
TOLUENE-D8	2037-26-5	91			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	3900		72	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	108			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	4200		72	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	117			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
PHENOL	108-95-2	2400		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
PHENOL	108-95-2	65			% REC	Y 8270	11/27/00 17:55 tjh	1.0
BIS(2-CHLOROETHYL)ETHER	111-44-4	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-CHLOROPHENOL	95-57-8	2200		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-CHLOROPHENOL	95-57-8	58			% REC	Y 8270	11/27/00 17:55 tjh	1.0
1,3-DICHLOROBENZENE	541-73-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
1,4-DICHLOROBENZENE	106-46-7	900		380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
1,4-DICHLOROBENZENE	106-46-7	48			% REC	Y 8270	11/27/00 17:55 tjh	1.0
1,2-DICHLOROBENZENE	95-50-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-METHYLPHENOL	95-48-7	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
3- & 4-METHYLPHENOL		ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
N-NITROSODI-N-PROPYLAMINE	621-64-7	1000		1800	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
N-NITROSODI-N-PROPYLAMINE	621-64-7	54			% REC	Y 8270	11/27/00 17:55 tjh	1.0
HEXACHLOROETHANE	67-72-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
NITROBENZENE	98-95-3	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
ISOPHORONE	78-59-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2-NITROPHENOL	88-75-5	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4-DIMETHYLPHENOL	105-67-9	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0
2,4-DICHLOROPHENOL	120-83-2	ND	U	380	ug/Kg	Y 8270	11/27/00 17:55 tjh	1.0

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Original

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TA0-K0-P367-009

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SC01
 COMPOSITE #1 MATRIX SPIKE
 Type MS Matrix SOIL
 Sampled by CLIENT

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anal	DilF
AROCLOL-1254	11097-69-1	96			% REC	Y SW8082	11/21/00 14:24 kpp	1.0
AROCLOL-1260	11096-82-5	51		38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
SURROGATE RESULTS								
TETRACHLORO-M-XYLENE	877-09-8	38		3.8	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
TETRACHLORO-M-XYLENE	877-09-8	100			% REC	Y SW8082	11/21/00 14:24 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	46		3.8	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
DECACHLOROBIPHENYL	2051-24-3	119			% REC	Y SW8082	11/21/00 14:24 kpp	1.0
CHLOROMETHANE	74-87-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
BROMOMETHANE	74-83-9	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
VINYL CHLORIDE	75-01-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
CHLOROETHANE	75-00-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
METHYLENE CHLORIDE	75-09-2	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
ACETONE	67-64-1	ND	U	1400	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
CARBON DISULFIDE	75-15-0	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,1-DICHLOROETHENE	75-35-4	1500		360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,1-DICHLOROETHENE	75-35-4	86			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
1,1-DICHLOROETHANE	75-34-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,2-DICHLOROETHENE	540-59-0	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
CHLOROFORM	67-66-3	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,2-DICHLOROETHANE	107-06-2	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
2-BUTANONE	78-93-3	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,1,1-TRICHLOROETHANE	71-55-6	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
CARBON TETRACHLORIDE	56-23-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
BROMODICHLOROMETHANE	75-27-4	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,2-DICHLOROPROPANE	78-87-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
CIS-1,3-DICHLOROPROPENE	10061-01-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
TRICHLOROETHENE	79-01-6	1800		360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
TRICHLOROETHENE	79-01-6	102			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
DIBROMOCHLOROMETHANE	124-48-1	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
1,1,2-TRICHLOROETHANE	79-00-5	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
BENZENE	71-43-2	1600		360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
BENZENE	71-43-2	88			% REC	Y SW8260B	11/17/00 12:03 pac	1.0
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
Bromoform	75-25-2	ND	U	360	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
4-METHYL-2-PENTANONE	108-10-1	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0
2-HEXANONE	591-78-6	ND	U	720	ug/Kg	Y SW8260B	11/17/00 12:03 pac	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-009

Page 1

SC01
 COMPOSITE #1 MATRIX SPIKE
 Type MS Matrix SOIL
 Sampled by CLIENT

COC 002953
 Date Sampled 11/09/00 10:50
 Date Received 11/11/00 09:30

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
Extractable Organic Halides (EOX)		150		29	mg/kg	Y SW9023	11/16/00 08:00 PAC	1.0
Extractable Organic Halides (EOX)		108			% REC	Y SW9023	11/16/00 08:00 PAC	1.0
SILVER	7440-22-4	200		0.86	mg/kg	Y 6010B	11/29/00 01:29 CBS	1.0
SILVER	7440-22-4	86			% REC	Y 6010B	11/29/00 01:29 CBS	1.0
ARSENIC	7440-38-2	190		0.86	mg/kg	Y 6010B	11/29/00 01:29 CBS	1.0
ARSENIC	7440-38-2	84			% REC	Y 6010B	11/29/00 01:29 CBS	1.0
BARIUM	7440-39-3	170		0.17	mg/kg	Y 6010B	11/29/00 01:29 CBS	1.0
BARIUM	7440-39-3	75	*		% REC	Y 6010B	11/29/00 01:29 CBS	1.0
CADMIUM	7440-43-9	200		0.17	mg/kg	Y 6010B	11/29/00 01:29 CBS	1.0
CADMIUM	7440-43-9	87			% REC	Y 6010B	11/29/00 01:29 CBS	1.0
CHROMIUM	7440-47-3	190		0.86	mg/kg	Y 6010B	11/29/00 01:29 CBS	1.0
CHROMIUM	7440-47-3	85			% REC	Y 6010B	11/29/00 01:29 CBS	1.0
SELENIUM	7782-49-2	180		0.86	mg/kg	Y 6010B	11/29/00 01:29 CBS	1.0
SELENIUM	7782-49-2	76			% REC	Y 6010B	11/29/00 01:29 CBS	1.0
LEAD	7439-92-1	320		4.3	mg/kg	Y 6010B	11/28/00 05:48 CBS	5.0
LEAD	7439-92-1	142	*		% REC	Y 6010B	11/28/00 05:48 CBS	5.0
TOTAL PETROLEUM HYDROCARBONS		140		46	mg/kg	Y EPA418.1	11/27/00 14:00 MF	1.0
TOTAL PETROLEUM HYDROCARBONS		123			% REC	Y EPA418.1	11/27/00 14:00 MF	1.0
Reactivity Characteristic (Cyanide)		ND	U	250	mg/kg	SW846-7	11/27/00 13:00 EH	25
Reactivity Characteristic (Cyanide)		100			% REC	SW846-7	11/27/00 13:00 EH	25
Reactivity Characteristic (Sulfide)		190		500	mg/kg	SW846-7	11/27/00 13:00 EH	25
Reactivity Characteristic (Sulfide)		38	*		% REC	SW846-7	11/27/00 13:00 EH	25
MERCURY, TOTAL	7439-97-6	0.96		0.11	mg/Kg	Y 7471	11/24/00 13:29 JC2	1.0
MERCURY, TOTAL	7439-97-6	126	*		% REC	Y 7471	11/24/00 13:29 JC2	1.0
AROCLOR-1016	12674-11-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
AROCLOR-1221	11104-28-2	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
AROCLOR-1232	11141-16-5	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
AROCLOR-1242	53469-21-9	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
AROCLOR-1248	12672-29-6	ND	U	38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0
AROCLOR-1254	11097-69-1	180		38	ug/Kg	Y SW8082	11/21/00 14:24 kpp	1.0

ORIGINATOR

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-K0-P367-008

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D01

COC 002953

GRAB LEACHATE MATRIX SPIKE

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type LMS Matrix LEACHATE

Sampled by CLIENT

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
HEXACHLOROBUTADIENE, TCLP	87-68-3	0.29		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
HEXACHLOROBUTADIENE, TCLP	87-68-3	59			% REC	SW8270	11/22/00 16:36 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	0.46		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	52			% REC	SW8270	11/22/00 16:36 ra	1.0
NITROBENZENE, TCLP	98-95-3	0.63		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
NITROBENZENE, TCLP	98-95-3	72			% REC	SW8270	11/22/00 16:36 ra	1.0
PYRIDINE, TCLP	110-86-1	0.39		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
PYRIDINE, TCLP	110-86-1	44			% REC	SW8270	11/22/00 16:36 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	1.9		0.50	mg/L	SW8270	11/27/00 15:12 tjh	10
PENTACHLOROPHENOL, TCLP	87-86-5	214	*		% REC	SW8270	11/27/00 15:12 tjh	10

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-008

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D01

GRAB LEACHATE MATRIX SPIKE

COC 002953

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type LMS Matrix LEACHATE

Sampled by CLIENT

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	Rlimit	Units	S Method	Date/Time/Anl	DilF
TOXAPHENE, TCLP	8001-35-2	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
BENZENE, TCLP	71-43-2	20		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
BENZENE, TCLP	71-43-2	79			% REC	SW8260	11/15/00 00:16 pac	1.0
CARBON TETRACHLORIDE, TCLP	56-23-5	27		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
CARBON TETRACHLORIDE, TCLP	56-23-5	109			% REC	SW8260	11/15/00 00:16 pac	1.0
CHLOROBENZENE, TCLP	108-90-7	23		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
CHLOROBENZENE, TCLP	108-90-7	90			% REC	SW8260	11/15/00 00:16 pac	1.0
CHLOROFORM, TCLP	67-66-3	23		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
CHLOROFORM, TCLP	67-66-3	92			% REC	SW8260	11/15/00 00:16 pac	1.0
1,2-DICHLOROETHANE, TCLP	107-06-2	26		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
1,2-DICHLOROETHANE, TCLP	107-06-2	104			% REC	SW8260	11/15/00 00:16 pac	1.0
1,1-DICHLOROETHENE, TCLP	75-35-4	19		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
1,1-DICHLOROETHENE, TCLP	75-35-4	78			% REC	SW8260	11/15/00 00:16 pac	1.0
2-BUTANONE, TCLP	78-93-3	24		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
2-BUTANONE, TCLP	78-93-3	95			% REC	SW8260	11/15/00 00:16 pac	1.0
TETRACHLOROETHENE, TCLP	127-18-4	26		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
TETRACHLOROETHENE, TCLP	127-18-4	106			% REC	SW8260	11/15/00 00:16 pac	1.0
TRICHLOROETHENE, TCLP	79-01-6	29		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
TRICHLOROETHENE, TCLP	79-01-6	116			% REC	SW8260	11/15/00 00:16 pac	1.0
VINYL CHLORIDE, TCLP	75-01-4	20		5.0	mg/L	SW8260	11/15/00 00:16 pac	1.0
VINYL CHLORIDE, TCLP	75-01-4	82			% REC	SW8260	11/15/00 00:16 pac	1.0
CRESOLS, TOTAL, TCLP		1.2		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
CRESOLS, TOTAL, TCLP		70			% REC	SW8270	11/22/00 16:36 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	7.6	E	0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	858	E		% REC	SW8270	11/22/00 16:36 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	0.91		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	103	*		% REC	SW8270	11/22/00 16:36 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	0.88		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	100			% REC	SW8270	11/22/00 16:36 ra	1.0
1,4-DICHLOROBENZENE, TCLP	106-46-7	0.45		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
1,4-DICHLOROBENZENE, TCLP	106-46-7	52			% REC	SW8270	11/22/00 16:36 ra	1.0
2,4-DINITROTOLUENE, TCLP	121-14-2	0.077		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
2,4-DINITROTOLUENE, TCLP	121-14-2	52			% REC	SW8270	11/22/00 16:36 ra	1.0
HEXAChLOROBENZENE, TCLP	118-74-1	0.090		0.050	mg/L	SW8270	11/22/00 16:36 ra	1.0
HEXAChLOROBENZENE, TCLP	118-74-1	60			% REC	SW8270	11/22/00 16:36 ra	1.0

Original

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TA0-K0-P367-008

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D01

COC 002953

GRAB LEACHATE MATRIX SPIKE

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type LMS Matrix LEACHATE

Sampled by CLIENT

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
2,4-D, TCLP + DIL-MI	94-75-7	ND	U	0.010	mg/L	SW8151	11/22/00 11:46 tep	100
	Sample was diluted due to matrix interference							
2,4-D, TCLP	94-75-7	ND	U		% REC	SW8151	11/22/00 11:46 tep	100
2,4,5-TP (SILVEX), TCLP	93-72-1	0.0020		0.010	mg/L	SW8151	11/22/00 11:46 tep	100
2,4,5-TP (SILVEX), TCLP	93-72-1	78			% REC	SW8151	11/22/00 11:46 tep	100
LEAD, TCLP	7439-92-1	2.1		0.10	mg/L	SW6010	11/23/00 02:46 CBS	1.0
LEAD, TCLP	7439-92-1	106			% REC	SW6010	11/23/00 02:46 CBS	1.0
SILVER, TCLP	7440-22-4	2.1		0.020	mg/L	SW6010	11/23/00 02:46 CBS	1.0
SILVER, TCLP	7440-22-4	104			% REC	SW6010	11/23/00 02:46 CBS	1.0
ARSENIC, TCLP	7440-38-2	2.0		0.10	mg/L	SW6010	11/23/00 02:46 CBS	1.0
ARSENIC, TCLP	7440-38-2	101			% REC	SW6010	11/23/00 02:46 CBS	1.0
BARIUM, TCLP	7440-39-3	10		0.010	mg/L	SW6010	11/23/00 02:46 CBS	1.0
BARIUM, TCLP	7440-39-3	101			% REC	SW6010	11/23/00 02:46 CBS	1.0
CADMUM, TCLP	7440-43-9	2.0		0.020	mg/L	SW6010	11/23/00 02:46 CBS	1.0
CADMUM, TCLP	7440-43-9	100			% REC	SW6010	11/23/00 02:46 CBS	1.0
CHROMIUM, TCLP	7440-47-3	2.0		0.050	mg/L	SW6010	11/23/00 02:46 CBS	1.0
CHROMIUM, TCLP	7440-47-3	101			% REC	SW6010	11/23/00 02:46 CBS	1.0
SELENIUM, TCLP	7782-49-2	1.9		0.20	mg/L	SW6010	11/23/00 02:46 CBS	1.0
SELENIUM, TCLP	7782-49-2	94			% REC	SW6010	11/23/00 02:46 CBS	1.0
MERCURY, TCLP	7439-97-6	0.0019		0.0020	mg/L	SW7470	11/21/00 10:47 JC2	1.0
MERCURY, TCLP	7439-97-6	96			% REC	SW7470	11/21/00 10:47 JC2	1.0
TECHNICAL CHLORDANE, TCLP	57-74-9	0.0	D	0.075	mg/L	SW8081	11/28/00 11:36 tep	100
TECHNICAL CHLORDANE, TCLP	57-74-9	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
ENDRIN, TCLP	72-20-8	0.0	D	0.015	mg/L	SW8081	11/28/00 11:36 tep	100
ENDRIN, TCLP	72-20-8	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
HEPTACHLOR, TCLP	76-44-8	0.0	D	0.0075	mg/L	SW8081	11/28/00 11:36 tep	100
HEPTACHLOR, TCLP	76-44-8	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	0.0	D	0.0075	mg/L	SW8081	11/28/00 11:36 tep	100
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
GAMMA-BHC, TCLP	58-89-9	0.0	D	0.0075	mg/L	SW8081	11/28/00 11:36 tep	100
GAMMA-BHC, TCLP	58-89-9	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
METHOXYCHLOR, TCLP	72-43-5	0.0	D	0.075	mg/L	SW8081	11/28/00 11:36 tep	100
METHOXYCHLOR, TCLP	72-43-5	0.0	D		% REC	SW8081	11/28/00 11:36 tep	100
TOXAPHENE, TCLP	8001-35-2	0.0	D	0.075	mg/L	SW8081	11/28/00 11:36 tep	100

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-007

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COC 002953

GRAB LEACHATE

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type L Matrix LEACHATE

Sampled by CLIENT

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	Rlimit	Units	S Method	Date/Time/Anl	DilF
2,4-DINITROTOLUENE, TCLP	121-14-2	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
HEXACHLOROBENZENE, TCLP	118-74-1	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
HEXACHLOROBUTADIENE, TCLP	87-68-3	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
NITROBENZENE, TCLP	98-95-3	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
PYRIDINE, TCLP	110-86-1	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	6.6		0.50	mg/L	SW8270	11/27/00 14:18 tjh	10

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CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TA0-K0-P367-007

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D01
 GRAB LEACHATE

COC 002953

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type L Matrix LEACHATE
 Sampled by CLIENT

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
2,4-D, TCLP	94-75-7	ND	U	0.050	mg/L	SW8151	11/22/00 10:59 tep	100
2,4,5-TP (SILVEX), TCLP	93-72-1	ND	U	0.050	mg/L	SW8151	11/22/00 10:59 tep	100
LEAD, TCLP	7439-92-1	0.16		0.10	mg/L	SW6010	11/23/00 02:37 CBS	1.0
SILVER, TCLP	7440-22-4	ND	U	0.020	mg/L	SW6010	11/23/00 02:37 CBS	1.0
ARSENIC, TCLP	7440-38-2	ND	U	0.10	mg/L	SW6010	11/23/00 02:37 CBS	1.0
BARIUM, TCLP	7440-39-3	0.013		0.010	mg/L	SW6010	11/23/00 02:37 CBS	1.0
CADMUM, TCLP	7440-43-9	ND	U	0.020	mg/L	SW6010	11/23/00 02:37 CBS	1.0
CHROMIUM, TCLP	7440-47-3	ND	U	0.050	mg/L	SW6010	11/23/00 02:37 CBS	1.0
SELENIUM, TCLP	7782-49-2	ND	U	0.20	mg/L	SW6010	11/23/00 02:37 CBS	1.0
MERCURY, TCLP	7439-97-6	ND	U	0.0020	mg/L	SW7470	11/21/00 10:45 JC2	1.0
TECHNICAL CHLORDANE, TCLP	57-74-9	ND	U	0.30	mg/L	SW8081	11/28/00 11:01 tep	100
ENDRIN, TCLP	72-20-8	ND	U	0.060	mg/L	SW8081	11/28/00 11:01 tep	100
HEPTACHLOR, TCLP	76-44-8	ND	U	0.030	mg/L	SW8081	11/28/00 11:01 tep	100
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	ND	U	0.030	mg/L	SW8081	11/28/00 11:01 tep	100
GAMMA-BHC, TCLP	58-89-9	ND	U	0.030	mg/L	SW8081	11/28/00 11:01 tep	100
METHOXYCHLOR, TCLP	72-43-5	ND	U	0.30	mg/L	SW8081	11/28/00 11:01 tep	100
TOXAPHENE, TCLP	8001-35-2	ND	U	0.30	mg/L	SW8081	11/28/00 11:01 tep	100
BENZENE, TCLP	71-43-2	15		5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
CARBON TETRACHLORIDE, TCLP	56-23-5	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
CHLOROBENZENE, TCLP	108-90-7	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
CHLOROFORM, TCLP	67-66-3	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
1,2-DICHLOROETHANE, TCLP	107-06-2	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
1,1-DICHLOROETHENE, TCLP	75-35-4	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
2-BUTANONE, TCLP	78-93-3	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
TETRACHLOROETHENE, TCLP	127-18-4	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
TRICHLOROETHENE, TCLP	79-01-6	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
VINYL CHLORIDE, TCLP	75-01-4	ND	U	5.0	mg/L	SW8260	11/14/00 23:33 pac	1.0
CRESOLS, TOTAL, TCLP		ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	6.4	E	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0
1,4-DICHLOROBENZENE, TCLP	106-46-7	ND	U	0.050	mg/L	SW8270	11/22/00 15:50 ra	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TA0-K0-P367-006

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D01

GRAB

COC 002953

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type F Matrix OIL

Sampled by CLIENT

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
DIBENZO(A,H)ANTHRACENE	53-70-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZO(G,H,I)PERYLENE	191-24-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZYL ALCOHOL	100-51-6	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZOIC ACID	65-85-0	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BIS(2-CHLOROISOPROPYL)ETHER	108-60-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
SURROGATE RESULTS								
NITROBENZENE-D5	4165-60-0	0.0	D	970000	ug/Kg	8270	11/27/00 13:33	jer 10
NITROBENZENE-D5	4165-60-0	0.0	D	% REC		8270	11/27/00 13:33	jer 10
2-FLUOROBIPHENYL	321-60-8	0.0	D	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2-FLUOROBIPHENYL	321-60-8	0.0	D	% REC		8270	11/27/00 13:33	jer 10
TERPHENYL-D14	1718-51-0	0.0	D	970000	ug/Kg	8270	11/27/00 13:33	jer 10
TERPHENYL-D14	1718-51-0	0.0	D	% REC		8270	11/27/00 13:33	jer 10
PHENOL-D5	4165-62-2	0.0	D	970000	ug/Kg	8270	11/27/00 13:33	jer 10
PHENOL-D5	4165-62-2	0.0	D	% REC		8270	11/27/00 13:33	jer 10
2-FLUOROPHENOL	367-12-4	0.0	D	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2-FLUOROPHENOL	367-12-4	0.0	D	% REC		8270	11/27/00 13:33	jer 10
2,4,6-TRIBROMOPHENOL	118-79-6	0.0	D	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2,4,6-TRIBROMOPHENOL	118-79-6	0.0	D	% REC		8270	11/27/00 13:33	jer 10
PENTACHLOROPHENOL	87-86-5	38000		9700	mg/Kg	8270	11/27/00 15:10	jer 100
SURROGATE RESULTS								
NITROBENZENE-D5	4165-60-0	0.0	D	9700	mg/Kg	8270	11/27/00 15:10	jer 100
NITROBENZENE-D5	4165-60-0	0.0	D	% REC		8270	11/27/00 15:10	jer 100
2-FLUOROBIPHENYL	321-60-8	0.0	D	9700	mg/Kg	8270	11/27/00 15:10	jer 100
2-FLUOROBIPHENYL	321-60-8	0.0	D	% REC		8270	11/27/00 15:10	jer 100
TERPHENYL-D14	1718-51-0	0.0	D	9700	mg/Kg	8270	11/27/00 15:10	jer 100
TERPHENYL-D14	1718-51-0	0.0	D	% REC		8270	11/27/00 15:10	jer 100
PHENOL-D5	4165-62-2	0.0	D	9700000	ug/Kg	8270	11/27/00 15:10	jer 100
PHENOL-D5	4165-62-2	0.0	D	% REC		8270	11/27/00 15:10	jer 100
2-FLUOROPHENOL	367-12-4	0.0	D	9700000	ug/Kg	8270	11/27/00 15:10	jer 100
2-FLUOROPHENOL	367-12-4	0.0	D	% REC		8270	11/27/00 15:10	jer 100
2,4,6-TRIBROMOPHENOL	118-79-6	0.0	D	9700000	ug/Kg	8270	11/27/00 15:10	jer 100
2,4,6-TRIBROMOPHENOL	118-79-6	0.0	D	% REC		8270	11/27/00 15:10	jer 100

ORIGIN

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-006

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D01

GRAB

COC 002953

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type F Matrix OIL

Sampled by CLIENT

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
HEXACHLOROCYCLOPENTADIENE	77-47-4	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2,4,6-TRICHLOROPHENOL	88-06-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2,4,5-TRICHLOROPHENOL	95-95-4	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2-CHLORONAPHTHALENE	91-58-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2-NITROANILINE	88-74-4	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
DIMETHYLPHthalATE	131-11-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
ACENAPHTHYLENE	208-96-8	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2,6-DINITROTOLUENE	606-20-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
3-NITROANILINE	99-09-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
ACENAPHTHENE	83-32-9	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2,4-DINITROPHENOL	51-28-5	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
4-NITROPHENOL	100-02-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
DIBENZOFURAN	132-64-9	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
2,4-DINITROTOLUENE	121-14-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
DIETHYLPHthalATE	84-66-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
4-CHLORODIPHENYLETHER	7005-72-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
FLUORENE	86-73-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
4-NITROANILINE	100-01-6	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
4,6-DINITRO-2-METHYLPHENOL	534-52-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
N-NITROSODIPHENYLAMINE	86-30-6	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
4-BROMOPHENYL PHENYL ETHER	101-55-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
HEXACHLOROBENZENE	118-74-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
PHENANTHRENE	85-01-8	1000000		970000	ug/Kg	8270	11/27/00 13:33	jer 10
ANTHRACENE	120-12-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
DI-N-BUTYLPHthalATE	84-74-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
FLUORANTHENE	206-44-0	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
PYRENE	129-00-0	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BUTYL BENZYL PHTHALATE	85-68-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
3,3-DICHLOROBENZIDINE	91-94-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZO(A)ANTHRACENE	56-55-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
CHRYSENE	218-01-9	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BIS(2-ETHYLHEXYL) PHTHALATE	117-81-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
DI-N-OCTYLPHthalATE	117-84-0	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZO(B)FLUORANTHENE	205-99-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZO(K)FLUORANTHENE	207-08-9	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
BENZO(A)PYRENE	50-32-8	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10
INDENO(1,2,3-CD)PYRENE	193-39-5	ND	U	970000	ug/Kg	8270	11/27/00 13:33	jer 10

CT&E Environmental Services Inc.
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GUARDIAN ENVIRONMENTAL SERVICES, INC.

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D01

COC 002953

GRAB

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type F Matrix OIL

Sampled by CLIENT

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
TOLUENE-D8	2037-26-5	109			% REC	SW8260B	11/13/00 19:03 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	23000		500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	92			% REC	SW8260B	11/13/00 19:03 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	25000		500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	100			% REC	SW8260B	11/13/00 19:03 pac	1.0
XYLEMES (TOTAL)	1330-20-7	710000		100000	ug/Kg	SW8260B	11/14/00 12:12 pac	1.0
SURROGATE RESULTS								
TOLUENE-D8	2037-26-5	510000		10000	ug/Kg	SW8260B	11/14/00 12:12 pac	1.0
TOLUENE-D8	2037-26-5	101			% REC	SW8260B	11/14/00 12:12 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	470000		10000	ug/Kg	SW8260B	11/14/00 12:12 pac	1.0
4-BROMOFLUOROBENZENE	460-00-4	94			% REC	SW8260B	11/14/00 12:12 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	450000		10000	ug/Kg	SW8260B	11/14/00 12:12 pac	1.0
1,2-DICHLOROETHANE-D4	17060-07-0	89			% REC	SW8260B	11/14/00 12:12 pac	1.0
PHENOL	108-95-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
BIS(2-CHLOROETHYL)ETHER	111-44-4	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
2-CHLOROPHENOL	95-57-8	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
1,3-DICHLOROBENZENE	541-73-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
1,4-DICHLOROBENZENE	106-46-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
1,2-DICHLOROBENZENE	95-50-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
2-METHYLPHENOL	95-48-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
3- & 4-METHYLPHENOL		ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
N-NITROSODI-N-PROPYLAMINE	621-64-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
HEXACHLOROETHANE	67-72-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
NITROBENZENE	98-95-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
ISOPHORONE	78-59-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
2-NITROPHENOL	88-75-5	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
2,4-DIMETHYLPHENOL	105-67-9	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
BIS(2-CHLOROETHOXY) METHANE	111-91-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
2,4-DICHLOROPHENOL	120-83-2	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
1,2,4-TRICHLOROBENZENE	120-82-1	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
NAPHTHALENE	91-20-3	980000		970000	ug/Kg	8270	11/27/00 13:33 jer	10
4-CHLOROANILINE	106-47-8	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
HEXACHLOROBUTADIENE	87-68-3	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
4-CHLORO-3-METHYLPHENOL	59-50-7	ND	U	970000	ug/Kg	8270	11/27/00 13:33 jer	10
2-METHYLNAPHTHALENE	91-57-6	2900000		970000	ug/Kg	8270	11/27/00 13:33 jer	10

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D01

COC 002953

GRAB

Date Sampled 11/09/00 11:20

Date Received 11/11/00 09:30

Type F Matrix OIL

Sampled by CLIENT

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
DECACHLOROBIPHENYL	2051-24-3	13000		790	ug/Kg	SW8082	11/15/00 08:37 kpp	10
DECACHLOROBIPHENYL	2051-24-3	1320	*		% REC	SW8082	11/15/00 08:37 kpp	10
CHLOROMETHANE	74-87-3	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
BROMOMETHANE	74-83-9	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
VINYL CHLORIDE	75-01-4	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
CHLOROETHANE	75-00-3	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
METHYLENE CHLORIDE	75-09-2	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
ACETONE	67-64-1	ND	U	5000	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
CARBON DISULFIDE	75-15-0	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,1-DICHLOROETHENE	75-35-4	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,1-DICHLOROETHANE	75-34-3	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,2-DICHLOROETHENE	540-59-0	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
CHLOROFORM	67-66-3	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,2-DICHLOROETHANE	107-06-2	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
2-BUTANONE	78-93-3	ND	U	5000	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,1,1-TRICHLOROETHANE	71-55-6	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
CARBON TETRACHLORIDE	56-23-5	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
BROMODICHLOROMETHANE	75-27-4	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,2-DICHLOROPROPANE	78-87-5	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
CIS-1,3-DICHLOROPROPENE	10061-01-5	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
TRICHLOROETHENE	79-01-6	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
DIBROMOCHLOROMETHANE	124-48-1	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,1,2-TRICHLOROETHANE	79-00-5	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
BENZENE	71-43-2	3400		2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
TRANS-1,3-DICHLOROPROPENE	10061-02-6	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
BROMOFORM	75-25-2	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
4-METHYL-2-PENTANONE	108-10-1	ND	U	5000	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
2-HEXANONE	591-78-6	ND	U	5000	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
TETRACHLOROETHENE	127-18-4	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
1,1,2,2-TETRACHLOROETHANE	79-34-5	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
TOLUENE	108-88-3	56000		2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
CHLOROBENZENE	108-90-7	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
ETHYLBENZENE	100-41-4	64000		2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
STYRENE	100-42-5	ND	U	2500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0
SURROGATE RESULTS								
TOLUENE-D8	2037-26-5	27000		500	ug/Kg	SW8260B	11/13/00 19:03 pac	1.0

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CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-K0-P367-006

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D01
GRABCOC 002953
Date Sampled 11/09/00 11:20
Date Received 11/11/00 09:30Type F Matrix OIL
Sampled by CLIENT

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
Extractable Organic Halides (EOX)		48		25	mg/kg	SW9023	11/16/00 08:00 PAC	1.0
ARSENIC, TOTAL	7440-38-2	ND	U	0.75	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
BARIUM, TOTAL	7440-39-3	0.54		0.15	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
CADMIUM, TOTAL	7440-43-9	ND	U	0.15	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
CHROMIUM, TOTAL	7440-47-3	ND	U	0.75	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
LEAD, TOTAL	7439-92-1	3.6		0.75	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
SELENIUM, TOTAL	7782-49-2	ND	U	0.75	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
SILVER, TOTAL	7440-22-4	ND	U	0.75	mg/Kg	SW6010M	11/15/00 13:41 JWJ	1.0
Moisture Content (Dean Stark dist.)		1.5		1.0	%	D95-83	11/27/00 08:30 CMM	1.0
TOTAL PETROLEUM HYDROCARBONS		710000		40000	mg/kg	EPA418.1	11/27/00 14:00 MF	1000
Reactivity Characteristic (Cyanide)		ND	U	250	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
Reactivity Characteristic (Sulfide)		ND	U	500	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
MERCURY, TOTAL	7439-97-6	ND	U	1.0	mg/L	SW7470M	11/27/00 15:17 JC2	1.0
AROCLOR-1016	12674-11-2	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
AROCLOR-1221	11104-28-2	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
AROCLOR-1232	11141-16-5	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
AROCLOR-1242	53469-21-9	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
AROCLOR-1248	12672-29-6	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
AROCLOR-1254	11097-69-1	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
AROCLOR-1260	11096-82-5	ND	U	7900	ug/Kg	SW8082	11/15/00 08:37 kpp	10
+ DIL-MI	Sample was diluted due to matrix interference							
SURROGATE RESULTS								
TETRACHLORO-M-XYLENE	877-09-8	400		790	ug/Kg	SW8082	11/15/00 08:37 kpp	10
TETRACHLORO-M-XYLENE	877-09-8	41			% REC	SW8082	11/15/00 08:37 kpp	10

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-005

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SC02
 COMPOSITE #2 LEACHATE

COC 002953
 Date Sampled 11/09/00 11:00
 Date Received 11/11/00 09:30

Type L Matrix LEACHATE
 Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DilF
1,4-DICHLOROBENZENE, TCLP	106-46-7	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
2,4-DINITROTOLUENE, TCLP	121-14-2	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
HEXACHLOROBENZENE, TCLP	118-74-1	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
HEXACHLOROBUTADIENE, TCLP	87-68-3	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
HEXACHLOROETHANE, TCLP	67-72-1	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
NITROBENZENE, TCLP	98-95-3	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
PYRIDINE, TCLP	110-86-1	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0

QDIA, Inc.

**CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory**

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

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SC02
COMPOSITE #2 LEACHATE

COC 002953

Date Sampled 11/09/00 11:00

Date Received 11/11/00 09:30

Type L Matrix LEACHATE
Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anl	DILF
2,4-D, TCLP	94-75-7	ND	U	0.010	mg/L	SW8151	11/22/00 01:40 tep	10
2,4,5-TP (SILVEX), TCLP	93-72-1	ND	U	0.010	mg/L	SW8151	11/22/00 01:40 tep	10
SILVER, TCLP	7440-22-4	ND	U	0.020	mg/L	SW6010	11/23/00 02:29 CBS	1.0
ARSENIC, TCLP	7440-38-2	ND	U	0.10	mg/L	SW6010	11/23/00 02:29 CBS	1.0
BARIUM, TCLP	7440-39-3	0.94		0.010	mg/L	SW6010	11/23/00 02:29 CBS	1.0
CADMIUM, TCLP	7440-43-9	0.023		0.020	mg/L	SW6010	11/23/00 02:29 CBS	1.0
CHROMIUM, TCLP	7440-47-3	ND	U	0.050	mg/L	SW6010	11/23/00 02:29 CBS	1.0
SELENIUM, TCLP	7782-49-2	ND	U	0.20	mg/L	SW6010	11/23/00 02:29 CBS	1.0
LEAD, TCLP	7439-92-1	91		0.10	mg/L	SW6010	11/28/00 10:40 CBS	5.0
MERCURY, TCLP	7439-97-6	ND	U	0.0020	mg/L	SW7470	11/21/00 10:43 JC2	1.0
TECHNICAL CHLORDANE, TCLP	57-74-9	ND	U	0.030	mg/L	SW8081	11/22/00 20:25 tep	10
ENDRIN, TCLP	72-20-8	ND	U	0.0060	mg/L	SW8081	11/22/00 20:25 tep	10
HEPTACHLOR, TCLP	76-44-8	ND	U	0.0030	mg/L	SW8081	11/22/00 20:25 tep	10
HEPTACHLOR EPOXIDE, TCLP	1024-57-3	ND	U	0.0030	mg/L	SW8081	11/22/00 20:25 tep	10
GAMMA-BHC, TCLP	58-89-9	ND	U	0.0030	mg/L	SW8081	11/22/00 20:25 tep	10
METHOXYCHLOR, TCLP	72-43-5	ND	U	0.040	mg/L	SW8081	11/22/00 20:25 tep	10
TOXAPHENE, TCLP	8001-35-2	ND	U	0.050	mg/L	SW8081	11/22/00 20:25 tep	10
BENZENE, TCLP	71-43-2	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
CARBON TETRACHLORIDE, TCLP	56-23-5	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
CHLOROBENZENE, TCLP	108-90-7	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
CHLOROFORM, TCLP	67-66-3	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
1,2-DICHLOROETHANE, TCLP	107-06-2	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
1,1-DICHLOROETHENE, TCLP	75-35-4	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
2-BUTANONE, TCLP	78-93-3	ND	U	0.20	mg/L	SW8260	11/14/00 22:51 pac	20
TETRACHLOROETHENE, TCLP	127-18-4	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
TRICHLOROETHENE, TCLP	79-01-6	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
VINYL CHLORIDE, TCLP	75-01-4	ND	U	0.10	mg/L	SW8260	11/14/00 22:51 pac	20
CRESOLS, TOTAL, TCLP		ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
PENTACHLOROPHENOL, TCLP	87-86-5	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
2,4,5-TRICHLOROPHENOL, TCLP	95-95-4	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0
2,4,6-TRICHLOROPHENOL, TCLP	88-06-2	ND	U	0.050	mg/L	SW8270	11/22/00 15:05 ra	1.0

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

Laboratory Number TAO-KO-P367-004

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GUARDIAN ENVIRONMENTAL SERVICES, INC.

SC02
COMPOSITE #2COC 002953
Date Sampled 11/09/00 11:00
Date Received 11/11/00 09:30Type F Matrix SOIL
Sampled by CLIENT

% Solids 89

120100 1520

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg RLimit	Units	S Method	Date/Time/Anl	DilF
TERPHENYL-D14	1718-51-0	3100	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
TERPHENYL-D14	1718-51-0	82		% REC	Y 8270	11/27/00 17:01 tjh	1.0
PHENOL-D5	4165-62-2	2900	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
PHENOL-D5	4165-62-2	78		% REC	Y 8270	11/27/00 17:01 tjh	1.0
2-FLUOROPHENOL	367-12-4	2500	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2-FLUOROPHENOL	367-12-4	66		% REC	Y 8270	11/27/00 17:01 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	3600	410	ug/Kg	Y 8270	11/27/00 17:01 tjh	1.0
2,4,6-TRIBROMOPHENOL	118-79-6	97		% REC	Y 8270	11/27/00 17:01 tjh	1.0

+ IS-R Internal standard did not meet acceptance criteria due to matrix interference: demonstrated by reanalysis

045
ORIGINAL

CT&E Environmental Services Inc.
Laboratory Division: Charleston Laboratory

(b) (4)

GUARDIAN ENVIRONMENTAL SERVICES, INC.

Laboratory Number TAO-KO-P367-011

Page 1

SC01

COMPOSITE #1 DUP

COC 002953

Date Sampled 11/09/00 10:50

Date Received 11/11/00 09:30

Type DUP Matrix SOIL

Sampled by CLIENT

% Solids 87

120100 1521

ANALYSIS FOR REQUESTED PARAMETERS

Analyzed Parameter	CAS No.	Result	Flg	RLimit	Units	S Method	Date/Time/Anal	DilF
SILVER	7440-22-4	ND	U	0.86	mg/Kg	Y 6010B	11/29/00 01:39 CBS	1.0
ARSENIC	7440-38-2	21		0.86	mg/Kg	Y 6010B	11/29/00 01:39 CBS	1.0
BARIUM	7440-39-3	140		0.17	mg/Kg	Y 6010B	11/29/00 01:39 CBS	1.0
CADMIUM	7440-43-9	1.4		0.17	mg/Kg	Y 6010B	11/29/00 01:39 CBS	1.0
CHROMIUM	7440-47-3	57		0.86	mg/Kg	Y 6010B	11/29/00 01:39 CBS	1.0
SELENIUM	7782-49-2	ND	U	0.86	mg/Kg	Y 6010B	11/29/00 01:39 CBS	1.0
LEAD	7439-92-1	4400		4.3	mg/Kg	Y 6010B	11/28/00 05:48 CBS	5.0
Moisture (Percent)		89		0.010	%	EPA160.3	11/17/00 12:00 MHS	1.0
TOTAL PETROLEUM HYDROCARBONS		520		46	mg/kg	Y EPA418.1	11/27/00 14:00 MF	1.0
Low Temperature Ignition (TOC)		2.3		0.10	%	EPA-600/	11/20/00 12:00 MHS	1.0
Reactivity Characteristic (Cyanide)		ND	U	250	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
Reactivity Characteristic (Sulfide)		ND	U	500	mg/kg	SW846-7	11/27/00 13:00 EH	1.0
pH		7.71			S.U.	SW9045	11/27/00 18:15 TL	1.0
MERCURY, TOTAL	7439-97-6	0.12		0.11	mg/Kg	Y 7471	11/24/00 13:31 JC2	1.0

Guardian Environmental
Project: 12th Street
TA0-K0-P367-001/011
Inorganics QA/QC Summary

Parameter	CT & E Description	Sample Result	Dup Result	Spike Level	MS		MSD		Spike %RPD	Dup %RPD
					Result	% Rec	Result	% Rec		
Cyanide Reactivity	TA0-K0-P367-009	ND	ND	250	20.0	--	8	F	---	---
Sulfide Reactivity	TA0-K0-P367-009	ND	ND	500	190	--	38	--	---	---
Total Solids	TA0-K0-P367-004	89.9	89.5	---	---	--	---	--	---	0.4
PH	TA0-K0-P367-001	7.81	7.71	---	---	--	---	--	---	1.3
Moisture Content	TA0-K0-P367-006	1.50	---	---	---	--	---	--	---	---
TOX	TA0-K0-P367-009	ND	---	50.0	54.2	--	108	--	52.7	105
TPH	TA0-K0-P367-006	*	---	---	---	--	---	--	---	---
TOC	TA0-K0-P367-004	2.21	2.79	---	---	--	---	--	---	NC

* Sample result is 4 times greater than spike amount

Guardian Environmental
Project: 12th Street
TA0-KO-P367-001/011

Inorganics QA/QC Summary

Target Analytes	True Value	Units	Continuing Calibration Verification									Method Blank
			CCV1	% Rec	True Value	CCV2	% Rec	CCV3	% Rec			
Cyanide Reactivity	250	mg/kg	1.21	0	F	---	---	---	---	---	---	ND
Sulfide Reactivity	500	mg/kg	440	88	--	---	---	---	---	---	---	ND
Total Solids	100	mg/kg	99.1	99	--	---	---	---	---	---	---	ND
PH	7.00	S.U.	6.99	100	--	7.00	--	6.92	99	--	---	NC
Moisture Content Dean Stark	5.00	---	4.10	82	--	---	---	---	---	---	---	NC
Total Organic Halides	5.00	ug/kg	5.19	104	--	5.00	--	5.12	102	--	---	ND
Total Petroleum Hydrocarbons	100	mg/kg	.111	111	--	250	--	265	165	--	---	ND
Total Organic Carbon Low Temp Ign.	---	---	---	---	--	---	--	---	---	---	---	NC

NC = not calculable

047
05/05/2012

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011**

**Metals QA/QC Summary
Matrix Spike / Spike Duplicate / Duplicate Data**

ICP Data

11/29/00

Results Expressed in mg/kg

Parameter	CTEESI Description	Sample Result	Dup Result	Spike Level	MS			MSD			Spike		Dup	
					Result	% Rec	Q	Result	% Rec	Q	% RPD	Q	% RPD	Q
Time	TA0-K0-P367-004	04:22	04:31		04:39			---						
Silver		ND	ND	2000	1659	83		---		--	---	--	NC	--
Arsenic		148	149	2000	1871	86		---		--	---	--	1	
Barium		1005	1211	2000	2922	96		---		--	---	--	19	
Cadmium		9	11	2000	1760	88		---		--	---	--	20	
Chromium		466	533	2000	2120	83		---		--	---	--	13	
Lead		33143	49887	2000	36389	---	H	---		--	---	--	40	F
Selenium		ND	13	2000	1677	84		---		--	---	--	NC	--

N - Not Spiked

H - Sample Concentration Greater Than 4X Spike Level

F - Outside Established Control Criteria

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011

Metals QA/QC Summary
Calibration Verification Standards

ICP Data

11/28/00

11/29/00

Analyte	Initial Calibration Verification					Continuing Calibration Verification					Method Blank	
	True	Units	Result	ICV % Rec.	Q	True	Result	CCV 1 % Rec	Q	Result	CCV 2 % Rec	
Time			23:28				00:08			02:45		02:20
Silver	2000	mg/kg	1951	98		600	603	101		595	99	ND
Arsenic	2000	mg/kg	1943	97		2000	2076	104		2042	102	ND
Barium	2000	mg/kg	1942	97		600	602	100		593	99	ND
Cadmium	2000	mg/kg	1972	99		600	626	104		626	104	ND
Chromium	2000	mg/kg	1939	97		600	614	102		610	102	ND
Lead	2000	mg/kg	1937	97		2000	2064	103		2052	103	ND
Selenium	2000	mg/kg	1920	96		1000	1019	102		1000	100	ND

F - Outside Established Control Criteria

766PQO

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011

Metals QA/QC Summary
Calibration Verification Standards

ICP Data

11/28/00

Analyte	True	Result	Continuing Calibration Verification											
			CCV 3			CCV 4			CCV 5			CCV 6		
			% Rec	Q		% Rec	Q		% Rec	Q		% Rec	Q	
Time		05:15			---			---			---			
Silver	600	596	99		---	---	--	---	---	--	---	---	---	--
Arsenic	2000	2058	103		---	---	--	---	---	--	---	---	---	--
Barium	600	594	99		---	---	--	---	---	--	---	---	---	--
Cadmium	600	626	104		---	---	--	---	---	--	---	---	---	--
Chromium	600	602	100		---	---	--	---	---	--	---	---	---	--
Lead	2000	2047	102		---	---	--	---	---	--	---	---	---	--
Selenium	1000	997	100		---	---	--	---	---	--	---	---	---	--

F - Outside Established Control Criteria

050

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011**

Metals QA/QC Summary

ICP Laboratory Control Sample Data

11/29/00		Results Expressed in mg/kg		
	Spike Level	Result	LCS % Rec	Q
Time		02:29		
Silver	2000	2047	102	
Arsenic	2000	2089	104	
Barium	2000	2041	102	
Cadmium	2000	2157	108	
Chromium	2000	2106	105	
Lead	2000	2123	106	
Selenium	2000	2038	102	

N - Not Spiked

F - Outside Established Control Criteria

051

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011**

**Metals QA/QC Summary
Matrix Spike / Spike Duplicate / Duplicate Data**

Mercury Cold Vapor Data

11/24/00

Results Expressed in mg/kg

Parameter	CTEESI Description	Sample Result	Dup Result	Spike Level	Result	MS		MSD		Spike		Dup	
						% Rec	Q	Result	% Rec	Q	% RPD	Q	% RPD
Time		13:23	---		13:28			---					
Mercury	TA0-K0-P367-001	ND	---	765	838	110		---	---	--	---	--	---

N - Not Spiked

H - Sample Concentration Greater Than 5X Spike Level

F - Outside Established Control Criteria

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011

Metals QA/QC Summary
Calibration Verification Standards

Mercury Cold Vapor Data

11/24/00

11/24/00

Analyte	Initial Calibration Verification					Continuing Calibration Verification							Method
	True	Units	Result	ICV % Rec.	Q	True	Result	CCV 1 % Rec	Q	Result	CCV 2 % Rec	Q	
Time			13:16				13:41			14:05			12:17
Mercury	2	mg/kg	2	95	2	2.08	104			2.14	107		ND

F - Outside Established Control Criteria

05
300
Anexo

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001-011**

Metals QA/QC Summary

Mercury Cold Vapor Laboratory Control Sample Data

11/24/00		Results Expressed in mg/kg			
Parameter	Spike Level	LCS		% Rec	Q
Time		12:19			
Mercury	667	740	111		

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011

Metals QA/QC Summary
Matrix Spike / Spike Duplicate / Duplicate Data

Mercury Cold Vapor Data

11/27/00

Results Expressed in mg/L

Parameter	CTEESI Description	Sample Result	Dup Result	Spike Level	MS			MSD			Spike			Dup		
					Result	% Rec	Q	Result	% Rec	Q	% RPD	Q	% RPD	Q		
Time		15:17	15:19		15:20			15:23								
Mercury	TA0-K0-P367-006	ND	ND	1000	810	81		794	79		2		NC	--		

N - Not Spiked

H - Sample Concentration Greater Than 5X Spike Level

F - Outside Established Control Criteria

051

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011

Metals QA/QC Summary
Calibration Verification Standards

Mercury Cold Vapor Data

11/27/00

11/27/00

Analyte	Initial Calibration Verification					Continuing Calibration Verification					Method		
	True	Units	Result	ICV % Rec.	Q	True	Result	CCV 1 % Rec	Q	Result	CCV 2 % Rec	Q	Blank
Time			15:08				15:34			15:59			15:13
Mercury	2	mg/L	2	98	2	1.82	91			1.84	92		ND

F - Outside Established Control Criteria

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

Metals QA/QC Summary

Mercury Cold Vapor Laboratory Control Sample Data

11/27/00		Results Expressed in mg/L		
Parameter	Spike Level	Result	% Rec	Q
Time		15:14		
Mercury	2	1.62	81	

057

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

**Metals QA/QC Summary
Matrix Spike / Spike Duplicate / Duplicate Data**

ICP Data

11/23/00

Results Expressed in mg/L

Parameter	CTEESI Description	Sample Result	Dup Result	Spike Level	MS			MSD			Spike		Dup	
					Result	% Rec	Q	Result	% Rec	Q	% RPD	Q	% RPD	Q
Time	TA0-K0-P367-002	02:12	---		02:20			---						
Silver		ND	---	2000	2027	101		---	---	--	---	--	---	--
Arsenic		ND	---	2000	2000	100		---	---	--	---	--	---	--
Barium		919	---	10000	10467	95		---	---	--	---	--	---	--
Cadmium		23	---	2000	1988	98		---	---	--	---	--	---	--
Chromium		ND	---	2000	1996	100		---	---	--	---	--	---	--
Selenium		ND	---	2000	1886	94		---	---	--	---	--	---	--

N - Not Spiked

H - Sample Concentration Greater Than 4X Spike Level

F - Outside Established Control Criteria

058

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011

Metals QA/QC Summary
Calibration Verification Standards

ICP Data

11/23/00

11/22/00

Analyte	Initial Calibration Verification					Continuing Calibration Verification							Method Blank
	True	Units	Result	ICV % Rec.	Q	True	Result	CCV 1 % Rec	Q	Result	CCV 2 % Rec	Q	
Time			00:44				01:05			03:11			20:41
Silver	2000	mg/L	1992	100		600	597	99		602	100		ND
Arsenic	2000	mg/L	2033	102		2000	2021	101		2061	103		ND
Barium	2000	mg/L	1966	98		600	596	99		603	101		ND
Cadmium	2000	mg/L	2069	103		600	623	104		631	105		ND
Chromium	2000	mg/L	2005	100		600	622	104		614	102		ND
Selenium	2000	mg/L	2003	100		1000	1011	101		997	100		ND

F - Outside Established Control Criteria

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

Metals QA/QC Summary

ICP Laboratory Control Sample Data

11/22/00

Results Expressed in mg/L

	Spike Level	Result	LCS	% Rec	Q
Time		20:49			
Silver	2000	2121		106	
Arsenic	2000	2175		109	
Barium	10000	10107		101	
Cadmium	2000	2095		105	
Chromium	2000	2110		105	
Selenium	2000	2135		107	

N - Not Spiked

F - Outside Established Control Criteria

000

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

**Metals QA/QC Summary
Matrix Spike / Spike Duplicate / Duplicate Data**

Mercury Cold Vapor Data

11/21/00

Results Expressed in mg/L

Parameter	CTEESI Description	Sample Result	Dup Result	Spike Level	MS			MSD			Spike			Dup		
					Result	% Rec	Q	Result	% Rec	Q	% RPD	Q	% RPD	Q	% RPD	Q
Time		10:35	---		10:37			---								
Mercury	TA0-K0-P367-002	ND	---	2	1.86	93		---	---	--	---	--	---	--	---	--

N - Not Spiked

H - Sample Concentration Greater Than 5X Spike Level

F - Outside Established Control Criteria

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

**Metals QA/QC Summary
Calibration Verification Standards**

Mercury Cold Vapor Data

Analyte	Initial Calibration Verification						Continuing Calibration Verification						Method
	True	Units	Result	ICV % Rec.	Q	True	Result	CCV 1 % Rec	Q	Result	CCV 2 % Rec	Q	
Time			09:23				09:51			10:16			10:31
Mercury	2	mg/L	2	94	2	1.89	95			1.85	93		ND

F - Outside Established Control Criteria

062

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011

Metals QA/QC Summary
Calibration Verification Standards

Mercury Cold Vapor Data

11/21/00

Analyte	Continuing Calibration Verification												
	True	Result	CCV 3 % Rec	Q	Result	CCV 4 % Rec	Q	Result	CCV 5 % Rec	Q	Result	CCV 6 % Rec	Q
Time		10:41			---			---			---		
Mercury	2	1.83	92		---	---	--	---	---	--	---	---	--

F - Outside Established Control Criteria

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

Metals QA/QC Summary

Mercury Cold Vapor Laboratory Control Sample Data

11/21/00		Results Expressed in mg/L			
Parameter	Spike Level	Result	LCS % Rec	Q	
Time		10:32			
Mercury	2	1.63	82		

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

**Metals QA/QC Summary
Matrix Spike / Spike Duplicate / Duplicate Data**

ICP Data

11/28/00

Results Expressed in mg/L

Parameter	CTEESI Description	Sample Result	Dup Result	Spike Level	MS			MSD			Spike		Dup	
					Result	% Rec	Q	Result	% Rec	Q	% RPD	Q	% RPD	Q
Time		10:24	---		10:32			---						
Lead	TA0-K0-P367-002	66443	---	2000	68480	---	H	--	--	--	--	--	--	--

N - Not Spiked

H - Sample Concentration Greater Than 4X Spike Level

F - Outside Established Control Criteria

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011

Metals QA/QC Summary
Calibration Verification Standards

ICP Data

11/27/00

Analyte	Initial Calibration Verification					Continuing Calibration Verification							Method Blank
	True	Units	Result	ICV % Rec.	Q	True	Result	CCV 1 % Rec	Q	Result	CCV 2 % Rec	Q	
Time			17:12				17:33			19:40			10:49
Lead	2000	mg/L	1980	99		2000	2060	103		2059	103		ND

F - Outside Established Control Criteria

990

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

**Metals QA/QC Summary
Calibration Verification Standards**

ICP Data

11/27/00

Analyte	Continuing Calibration Verification																
	True	Result	CCV 3	% Rec	Q	Result	CCV 4	% Rec	Q	Result	CCV 5	% Rec	Q	Result	CCV 6	% Rec	Q
Time		21:29				23:26				01:46				04:09			
Lead	2000	2063	103			1997	100			2028	101			2081	104		

F - Outside Established Control Criteria

Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011

Metals QA/QC Summary
Calibration Verification Standards

ICP Data

11/27/00

Analyte	Continuing Calibration Verification											
	CCV 7			CCV 8			CCV 9			CCV 10		
True	Result	% Rec	Q	Result	% Rec	Q	Result	% Rec	Q	Result	% Rec	Q
Time	06:02			09:22			11:31			---		
Lead	2000	1973	99	2101	105		2135	107		---	---	--

F - Outside Established Control Criteria

7/20/00
390

**Guardian Environmental
Project: 12th Street
CT&E ESI Number: TA0-K0-P367-001/011**

Metals QA/QC Summary

ICP Laboratory Control Sample Data

11/28/00

Results Expressed in mg/L

	Spike Level	LCS		
		Result	% Rec	Q
Time		10:57		
Lead	2000	2114	106	

N - Not Spiked

F - Outside Established Control Criteria

Sample_Name	Date	Time	Silver	Aluminu	Arscnic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
BLANK	11/27/00	16:08	-0.00025	-0.0007	-0.0005		0.0001	-0.00407	0.00233	0.00014	-0.00019	0.00042	0.00161	-0.00043
STD 3	11/27/00	16:15	0.26475	0.03393	0.23894		0.24942	0.11812	0.33949	0.57526	0.1008	0.12575	0.1423	0.03629
STD 4	11/27/00	16:21	0.52881	0.06777	0.48534		0.49543	0.24514	0.68918	1.17325	0.20478	0.25101	0.27498	0.07376
STD 5	11/27/00	16:28	1.05875	0.13642	0.95466		0.98733	0.48458	1.34793	2.27742	0.40621	0.50528	0.56155	0.14393
STD 6	11/27/00	16:35												
STD 7	11/27/00	16:40												
STD 8	11/27/00	16:45												
STD 5	11/27/00	16:50	1491.924	24847.14	4995.738		1468.617	500.3953	25105.75	1496.676	1500.913	1483.701	1465.378	9887.475
STD 8	11/27/00	16:57	-0.70592	8.42977	1.82009		0.18928	0.21836	32.82061	-0.22514	-0.34745	-0.20293	0.30799	21.81542
ICV	11/27/00	17:12	2043.374	2015.783	1993.849		2053.38	1958.533	2019.166	1978.69	1997.07	1990.453	2021.304	2021.585
ICV1	11/27/00	17:19	0.52422	2.99415	5.12014		0.76823	0.33814	38.8496	0.21292	1.1182	6.93679	1.42374	91.71155
ICB	11/27/00	17:26	0.57421	-0.59435	-1.53571		0.54661	0.03179	5.89379	0.25599	0.89536	-0.33717	-0.00405	61.46386
CCV	11/27/00	17:33	626.9544	25628.58	2039.275		623.0768	202.9045	25231.5	597.2871	616.6248	619.4728	631.8732	10062.24
CCV1	11/27/00	17:40	-3.89137	-16.3499	-4.93492		-0.48147	-0.11353	12.39168	-0.95092	-2.92097	-2.6742	-1.84052	-43.6539
CCB	11/27/00	17:49	0.11109	-5.70891	2.45546		0.13157	0.0006	8.08698	-0.05243	0.34386	-0.36548	0.0016	25.68348
CRI	11/27/00	17:55	21.12283	-2.14154	21.4899		415.7581	10.0084	7.20082	10.54641	104.2427	20.68311	52.0441	35.32861
ICSA	11/27/00	18:02	0.86665	104621.9	0.29516		0.59211	-0.05675	101640	-0.39004	1.52411	0.81186	-1.77294	40657.9
ICSAB	11/27/00	18:09	640.3163	105269	2065.068		634.958	206.5791	103182.1	604.5998	611.7838	618.0469	628.8895	40692.7
PB M6 11/21 L	11/27/00	18:16	94.58156	13213.67	251.5546		249.2387	4.77077	38377.64	12.01896	9.21853	170.0477	387.851	65369.37
LCS	11/27/00	18:25	175684.4	206185.4	171023.5		180648.9	171446.4	212300.4	174397.5	175308.6	173797.6	176856.4	212817.3
OK0P533001	11/27/00	18:33	-88.9139	7247345	5752.645		50383.48	358.7419	204263.5	93.392	3981.878	7324.593	5272.349	12289095
OK0P533002	11/27/00	18:41	390.2347	9158688	6578.618		57823.7	396.6105	224969.8	97.23568	4781.834	9469.785	5463.306	15324326
OK0P533003 QC	11/27/00	18:50	106.1931	8605004	7327.723		32465.49	284.3677	122924	86.1462	6913.796	8178.791	6179.555	14195710
OK0P533003 L	11/27/00	18:58	282.1183	9422818	8768.29		34633.05	364.5839	137455.7	-10.7132	7982.311	9010.59	6785.017	15489636
OK0P533003 AS	11/27/00	19:07	35815.46	7303219	200580.6		225290.5	198056.1	305608	196966	205545.1	205658.3	204182.8	11927223
OK0P533004 MS	11/27/00	19:15	168084.8	10004871	159106.6		205112.3	168117.5	314641	164977.2	173597	176728.8	173267.7	14382954
OK0P533005 MD	11/27/00	19:23	45.75275	8826670	7257.612		35287.51	305.2711	186616.8	95.4256	5884.908	8163.83	7263.113	15513416
OK0P533006	11/27/00	19:32	27.79795	9004246	7041.057		34105.33	329.0711	171471.8	79.64146	4794.716	8660.029	7268.357	13569367
CCV	11/27/00	19:40	617.3342	25341.52	2021.542		618.1586	205.0633	25765.87	613.4216	625.176	611.7432	600.3303	10145.27
CCV1	11/27/00	19:49	0.36475	-7.03998	1.85086		0.32867	0.03084	9.97563	0.05604	0.64736	-0.29278	0.55148	20.26361
CCB	11/27/00	19:57	-0.24692	-3.30419	-0.63331		0.05921	-0.07585	3.58488	0.146	0.70765	-0.12192	0.72471	14.972
OK0P533007	11/27/00	20:05	40.84193	5902297	5217.387		52258.82	233.5549	3520555	233.9226	4725.159	6549.706	9477.82	10357508
OK0P533008	11/27/00	20:14	-20.9585	8446418	7310.867		54675.04	308.146	1485154	167.7868	5501.941	8642.762	7866.056	13591292
OK0P533009	11/27/00	20:22	64.47813	6403822	20692.41		62779.14	306.4911	2012228	178.6091	6262.967	7061.392	8224.049	13098285
OK0P533010	11/27/00	20:31	-10.3984	4928692	5940.237		45579.34	285.8901	1107802	175.3857	3793.492	5938.457	7471.882	12124308
OK0P533011	11/27/00	20:39	-45.1043	4082871	8345.188		43837.55	220.4924	29780428	126.5053	4658.877	5123.415	15844.95	11782892
OK0P533012	11/27/00	20:47	-23.0677	6367749	9294.911		55050.91	287.4897	3500404	153.8818	5530.721	6969.855	9964.817	14385354
OK0P533013	11/27/00	20:56	-0.46766	4100231	7435.906		47458.92	231.9413	10409949	65.06436	4300.787	5174.631	13121.03	11195700
CRI	11/27/00	21:04	19.76809	-14.2822	19.94182		419.4161	10.45074	13.2585	10.42253	104.5668	19.92809	52.34117	27.11565
ICSA	11/27/00	21:13	-0.65275	101594.3	-2.01226		0.65296	0.0971	103697	-0.25122	0.47622	-0.7553	-2.37035	40372.18
iCSAB	11/27/00	21:21	617.9812	100061.3	2009.246		610.5206	203.7009	101991.5	602.2958	601.7592	599.5732	597.5856	39714.44

Sample_Name	Date	Time	Potassium	agnesi	anganes	olybcdenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
BLANK	11/27/00	16:08	0.48387	-0.00009	0.00007	0.00006	0.06639	-0.00012		0.00013				-0.00062
STD 3	11/27/00	16:15		0.2349	0.09267	0.13246	2.12831	0.16267		0.23794				0.12749
STD 4	11/27/00	16:21		0.47909	0.18708	0.2688	4.13315	0.33085		0.47859				0.25966
STD 5	11/27/00	16:28		0.95596	0.36649	0.52863	8.10332	0.64397		0.94838				0.51053
STD 6	11/27/00	16:35	1.13021											
STD 7	11/27/00	16:40	1.77388											
STD 8	11/27/00	16:45	2.97738											
STD 5	11/27/00	16:50	82685.32	25344.36	990.1368	2982.689	9849.463	1489.992	5018.466	9919.363	2487.325			4966.848
STD 8	11/27/00	16:57	9795.545	4.00283	-0.13575	1.96407	35082.78	-1.21313	2.65668	-1.04	-0.68635			7.37682
ICV	11/27/00	17:12	19292.41	2018.402	1998.198	2011.65	2043.683	1997.4	1980.023	2019.174	1983.057			2007.13
ICV1	11/27/00	17:19	79.86087	3.76057	1.46879	4.21274	10178.67	4.88388	3.05704	3.45879	2.58575			4.20738
ICB	11/27/00	17:26	143.8789	7.6557	0.17893	1.57764	-1.14391	0.80052	3.38905	2.90551	3.69087			4.37727
CCV	11/27/00	17:33	38000.7	25471.07	405.9653	3046.8	19350.58	600.8916	2060.089	10315.35	1039.9			2035.206
CCV1	11/27/00	17:40	5127.78	-22.3821	-0.4386	1.63487	2.9925	-3.04995	3.578	-9.37239	1.27022			1.09681
CCB	11/27/00	17:49	66.90615	4.20398	-0.05231	0.45022	-2.85528	0.27475	2.8175	-1.24144	1.13002			-0.46341
CRI	11/27/00	17:55	243.0537	6.56219	31.18125	0.48761	1.76382	85.17771	8.81481	128.239	12.76766			20.06946
ICSA	11/27/00	18:02	82.55831	105388.5	1.53636	-0.73309	8.2471	1.91849	7.40215	1.65594	-1.75025			0.66105
ICSAB	11/27/00	18:09	39064.29	107542.3	411.6808	625.3842	10371.14	606.2601	2043.273	1058.381	1033.032			2045.566
PB M6 11/21 L	11/27/00	18:16	19616.11	11108.9	211.7806	106.839	20559.52	257.6326	340.5553	195.9023	646.5731			-130.76
LCS	11/27/00	18:25	1646608	187714	173496.9	175039.1	198196.2	174233.7	174605.9	172577.9	160447.5			171807.3
OKOP533001	11/27/00	18:33	281918.8	944849.5	920459.6	777.163	32410.2	6607.648	9061.764	243.4874	103.8875			567.5564
OKOP533002	11/27/00	18:41	443485.9	1245588	921757.5	699.6942	31329.01	8077.412	11833.34	759.4716	-19.5189			230.3996
OKOP533003 QC	11/27/00	18:50	351414.8	1049916	532905.1	684.0152	33617.58	7012.211	13132.4	397.9379	-330.133			176.299
OKOP533003 L	11/27/00	18:58	613423.4	1139330	580254.8	1017.604	38262.89	8091.271	14515.19	230.0778	713.5994			-475.388
OKOP533003 AS	11/27/00	19:07	2131128	1064533	634140.4	202262.7	242490	204238.8	201188.6	195987.9	176651.4			196295.4
OKOP533004 MS	11/27/00	19:15	1851239	1324380	696164.9	164803.9	196357	174694.3	180826.8	102818	152633.4			162526.2
OKOP533005 MD	11/27/00	19:23	405864.8	1133667	443546.3	729.995	33969.49	7659.68	12567.65	174.787	279.5233			891.4994
OKOP533006	11/27/00	19:32	397624.2	1145262	435808.6	763.0517	30287.85	7826.145	15955.95	37.03607	214.2846			835.2261
CCV	11/27/00	19:40	38011.67	25827.45	406.6497	3092.783	19386.72	610.0088	2058.88	10280.52	1021.922			2045.892
CCV1	11/27/00	19:49	5396.657	6.57667	-0.02748	2.28097	6.68741	0.17736	1.5479	2.63623	2.30302			1.86473
CCB	11/27/00	19:57	507.8121	6.51696	-0.05203	0.15352	2.09048	0.25476	3.119	3.11668	-0.26945			-0.57711
OKOP533007	11/27/00	20:05	491644	1438819	699325.8	475.1754	42346.4	7728.545	13396.52	118.8851	691.9774			-177.484
OKOP533008	11/27/00	20:14	500417.1	1340208	557530.3	723.1458	34884.54	8264.722	18251.97	695.1096	-425.517			569.257
OKOP533009	11/27/00	20:22	369809.3	2253506	616579.4	211.2919	32910.41	10865.44	12652.68	376.5801	-318.197			567.8131
OKOP533010	11/27/00	20:31	253880	1027819	291914.1	382.4719	33736.4	7252.625	9907.025	323.2401	-5.86001			481.2769
OKOP533011	11/27/00	20:39	368501.6	6484660	379994.8	323.6135	53135.48	9175.714	12343.48	-54.4144	-121.392			-196.474
OKOP533012	11/27/00	20:47	337748.2	2105754	485091.8	695.9891	37055.57	9160.036	14528.81	333.3272	-18.1066			-202.151
OKOP533013	11/27/00	20:56	344959.7	2478934	391501.4	414.65	40771.16	9517.871	10132.53	243.138	-6.84556			170.5066
CRI	11/27/00	21:04	542.0502	3.62893	30.3983	0.03352	5.28306	83.43826	8.4238	121.7767	12.0977			19.64257
ICSA	11/27/00	21:13	504.6208	107081.2	1.36734	-0.24676	15.81884	0.86376	8.31821	-3.12857	2.51629			4.13855
ICSAB	11/27/00	21:21	38154.62	105151.7	397.5314	620.4588	9993.691	591.1044	2013.14	1023.159	988.9917			1998.276

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
BLANK	11/27/00	16:08	-0.00003	0.00011	0.00042	75772.5	-0.00027	-0.0004	-0.00065	0.00009
STD 3	11/27/00	16:15	0.02621	0.04644		76934	1.01243	0.24659	0.08573	0.07216
STD 4	11/27/00	16:21	0.0528	0.09565		75928	2.0685	0.51299	0.17253	0.14743
STD 5	11/27/00	16:28	0.10445	0.18501		76203	4.13338	1.001	0.35049	0.29021
STD 6	11/27/00	16:35			0.37692	76204.5				
STD 7	11/27/00	16:40			0.77388	74837.5				
STD 8	11/27/00	16:45			1.52396	73820.5				
STD 5	11/27/00	16:50	1488.583	1518.754	7.33704	77551	4960.945	5047.187	2457.555	2502.188
STD 8	11/27/00	16:57	0.45844	1.86874	9934.844	78268.5	0.15352	3.90619	-3.49196	0.7142
ICV	11/27/00	17:12	2007.018	1959.667	-0.61145	72797	1980.792	1979.639	1996.629	1976.281
ICV1	11/27/00	17:19	2.12582	3.68593	2060.488	72733.5	11.46916	-1.14291	3.39955	2.17929
ICB	11/27/00	17:26	2.16123	1.37154	-1.70502	70649	-3.42255	6.78953	-5.19127	8.12512
CCV	11/27/00	17:33	606.8889	593.0763	6.31453	71488.5	2058.287	2060.989	1045.95	1036.88
CCV1	11/27/00	17:40	-3.25264	-0.03483	5049.899	72091	8.68106	1.03009	4.07734	-0.13139
CCB	11/27/00	17:49	0.38929	0.99175	-2.44672	72683.5	5.34857	1.55365	2.3235	0.53401
CRI	11/27/00	17:55	104.8404	42.18505	628.438	69280	-6.31009	16.36571	-0.51304	19.39788
ICSA	11/27/00	18:02	-0.31234	-1.35403	-2.45231	70740.5	1.20591	10.49538	2.91338	-4.07875
ICSAB	11/27/00	18:09	623.1033	598.4558	994.4475	68107.5	2047.346	2041.24	1033.531	1032.782
PB M6 11/21 L	11/27/00	18:16	161.7151	1620.061	2632.703	70924.5	511.2855	255.2974	-590.032	1263.932
LCS	11/27/00	18:25	174053	174042.1	2894.436	73894	173418.5	175198.7	159577.8	160881.7
OKOP533001	11/27/00	18:33	12507.38	35398.35	3186.068	71596.5	9210.742	8987.36	561.928	-124.806
OKOP533002	11/27/00	18:41	17133.63	42642.63	3238.973	64908	12047.43	11726.44	619.5498	-338.592
OKOP533003 QC	11/27/00	18:50	15289.03	36799.77	3295.649	65255.5	13473.65	12962	596.1865	-792.617
OKOP533003 L	11/27/00	18:58	15374.6	41027.29	4389.547	64168	20962.84	11296.08	3105.815	-480.809
OKOP533003 AS	11/27/00	19:07	211712.2	228095.6	196708.3	64889	207675.7	197949.8	183752.5	173106.2
OKOP533004 MS	11/27/00	19:15	184279	206894.5	2966.745	63494	176755.9	182859.1	149516	154189.8
OKOP533005 MD	11/27/00	19:23	15633.92	38648.11	3468.49	65220	12181.41	12760.45	513.3365	162.7723
OKOP533006	11/27/00	19:32	15414.96	37993.84	3106.244	65523.5	15460.18	16203.43	144.9175	248.8967
CCV	11/27/00	19:40	608.1449	615.6649	8.31167	63700	2027.761	2074.415	1011.871	1026.941
CCV1	11/27/00	19:49	0.68193	2.9575	5024.647	62604.5	-2.3	3.46872	0.51563	3.19518
CCB	11/27/00	19:57	0.342	1.44046	-2.60455	63668.5	-0.19894	4.77525	-0.18997	-0.30932
OKOP533007	11/27/00	20:05	10311.84	40978.95	3199.651	64320	13486.72	13351.46	463.138	806.2068
OKOP533008	11/27/00	20:14	14923.46	42662.47	3388.621	64491.5	17934.3	18410.54	-451.602	-412.515
OKOP533009	11/27/00	20:22	9818.932	35320.34	3277.257	65509.5	12293.09	12832.18	-236.373	-359.067
OKOP533010	11/27/00	20:31	9946.721	27057.34	3109.028	65679	10026.02	9847.596	206.0984	-111.7
OKOP533011	11/27/00	20:39	6911.588	39727.44	2790.682	64186.5	12277.54	12376.38	447.9466	-405.653
OKOP533012	11/27/00	20:47	11689.83	34494.5	3043.297	60590.5	15428.02	14079.86	409.9717	-231.844
OKOP533013	11/27/00	20:56	6829.467	37759.14	2792.357	66086.5	9890.553	10253.32	-214.555	96.83547
CRI	11/27/00	21:04	103.5753	43.06075	611.0804	62668	6.59438	9.3369	11.07793	12.60662
ICSA	11/27/00	21:13	-0.06157	-1.05368	-2.33918	63746	6.13582	9.40749	2.55267	2.49792
ICSAB	11/27/00	21:21	603.2955	599.5492	976.5889	63710	2011.4	2014.008	988.0305	989.4713

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromium	Copper	Iron
CCV	11/27/00	21:29	617.4475	25229.27	2040.433		618.725	206.6761	26006.05	621.3797	632.078	613.8679	605.3984	10119.99
CCV1	11/27/00	21:38	-2.38276	-15.6825	-0.278		0.26079	0.04093	11.74927	-0.47307	-0.08398	-1.62725	-0.64605	32.02759
CCB	11/27/00	21:46	-0.26781	-13.242	-2.32635		0.0795	-0.00925	9.28297	0.01935	0.71341	-0.43173	0.67737	13.91866
OK0P281002	11/27/00	21:55	455.9661	1549.959	-354.83		51.589	70.177	236389.1	3.9498	203.7896	-53.5433	80.72004	4352.94
OK0P281003	11/27/00	22:03	-20.5506	-403.704	240.9565		35.62509	41.56172	134409.4	-8.4314	124.1448	-71.0707	5.95605	1049.723
OK0P281004	11/27/00	22:11	-29.8981	2614.211	-171.445		19.26302	48.34996	188026.9	-36.2964	223.2084	5.45228	109.1318	4393.72
PB M3 11/20 I	11/27/00	22:24	0.70514	-16.1479	1.48936		0.14794	0.0425	20.00281	-0.01861	0.73748	-0.32145	1.05861	40.91471
LCS	11/27/00	22:32	1909.953	1809.149	1884.616		1933.549	1903.353	1998.505	1963.037	1965.304	1924.582	1903.25	1945.054
LCS NA	11/27/00	22:40	-0.26382	-15.7336	-2.91678		0.05275	0.12976	26.41841	0.03487	0.58123	0.68019	2.16266	20.16091
OK0P504003	11/27/00	22:49	7.38923	6857.768	86.84919		2510.386	2.17582	979988.1	3.84088	144.018	39.35366	6.67576	119073.9
CRI	11/27/00	23:01	20.08158	-18.6719	20.49687		420.9922	10.38258	27.84708	10.56342	105.5885	19.94512	52.64264	27.86589
ICSA	11/27/00	23:09	0.47968	100237.8	5.99299		0.77056	0.21996	103131.5	-0.01333	1.11713	-0.1674	-0.86161	39959.86
ICSAB	11/27/00	23:18	619.0454	99438.05	2006.628		614.2676	205.3736	102378	610.5745	610.9292	624.7156	622.9127	39814.8
CCV	11/27/00	23:26	595.1488	23767.33	1974.657		595.403	201.8961	25241.63	606.7864	622.4537	590.809	577.5399	9766.779
CCV1	11/27/00	23:34	-0.64897	-28.6375	0.3414		0.08541	0.05524	16.36196	-0.10979	0.57149	-0.56072	0.51009	-11.8258
CCB	11/27/00	23:43	0.39399	-18.0845	0.07093		0.04932	0.16626	10.51057	-0.18851	0.36889	-0.57316	1.17277	8.30192
PB M1 11/8 CC	11/28/00	0:02	-0.43929	-9.85861	-0.52468		0.32681	0.14767	30.13518	0.08248	0.58099	-0.25297	0.56135	54.36314
LCS	11/28/00	0:11	2096.425	1987.334	2071.131		2115.125	2055.471	2134.179	2099.763	2106.531	2051.127	2055.931	2094.34
LCS NA	11/28/00	0:19	0.60096	-16.739	-1.77958		0.21479	0.28956	56.57335	-0.07228	0.94483	0.21479	0.86532	34.27673
OK0P206001	11/28/00	0:27	0.68181	382.3309	0.37796		55.28141	0.13025	53345.88	0.12525	15.21265	2.42254	67.64305	3073.366
OK0P206003	11/28/00	0:36	1.08822	287.9652	1.63794		49.64878	0.11115	51162.87	0.3066	12.89308	3.06225	47.69982	2466.181
OK0P206004	11/28/00	0:44	-0.56318	251.3363	-0.78256		43.45907	0.12342	40910.95	-0.09874	-0.36705	0.36732	4.61014	157.8986
PB M1 11/15 XX	11/28/00	0:56	0.57432	-3.67775	-0.40974		0.09156	0.2458	20.00928	0.06613	0.67747	0.37344	0.79053	10.94704
LCS	11/28/00	1:05	2053.419	2012.535	2030.112		2072.223	2034.034	2098.354	2077.29	2083.469	2049.415	2045.455	2094.975
OK0P408001	11/28/00	1:13	-1.18566	717.3091	1.36119		43.82971	0.61042	13247.15	0.09474	1.16482	0.95066	5.34035	2628.967
OK0P408002	11/28/00	1:22	0.21056	3.93921	-0.16297		37.78559	0.30999	12534.72	0.28587	1.25909	2.32697	5.4358	260.9323
CCV	11/28/00	1:46	611.8563	24445.79	1999.028		611.8159	205.1009	25763.95	615.3179	628.8421	611.2947	599.9507	9961.732
CCV1	11/28/00	1:55	-0.2691	-20.0941	0.07132		0.25444	0.30406	13.26757	0.01373	0.62006	-0.65933	0.6506	28.23378
CCB	11/28/00	2:03	0.13078	-23.0579	-3.45378		0.13026	0.20019	5.43378	-0.12419	-0.0708	-1.78945	-0.71211	21.82801
OK0P408003	11/28/00	2:12	-0.62998	2388.951	24.46534		116.2616	0.82688	11693.93	0.29782	6.21913	106.9178	69.3603	10023.12
OK0P408004 QC	11/28/00	2:20	-0.73908	19.59866	21.37044		32.07354	-0.0025	9667.533	-0.16067	-0.04398	97.78099	27.60718	190.4736
OK0P408004 L	11/28/00	2:29	4.76669	-33.9694	34.80934		30.55201	1.96196	9516.16	0.29925	4.61838	93.99459	42.33124	155.405
OK0P408004 MD	11/28/00	2:37	-0.80368	19.75277	23.84588		31.26581	-0.10262	9590.354	0.03113	0.21808	95.35015	25.8894	182.1321
OK0P408004 MS	11/28/00	2:45	2086.124	2039.828	2170.815		2138.191	2171.848	11712.64	2190.535	2211.974	2235.651	2164.787	2318.354
OK0P408004 MSD	11/28/00	2:54	2035.572	1974.309	2041.421		2086.573	2040.452	11124.48	2048.905	2071.931	2106.719	2054.635	2165.703
PB M3 11/16 B	11/28/00	3:10	-0.71498	-18.2383	-0.18347		1.33952	0.26999	10.48203	-0.0996	-0.25756	-0.69624	0.4123	26.49747
LCS	11/28/00	3:18	1907.212	1819.83	1885.087		1946.958	1901.623	1967.793	1967.499	1955.743	1891.362	1877.243	1934.232
OK0P454001	11/28/00	3:26	-0.14326	941.7188	1.65582		167.9585	0.19578	242241.1	0.20319	4.01323	2.86007	6.96079	1448.27
OK0P454002	11/28/00	3:35	0.70732	-2.03168	-2.66587		1.43314	0.44955	358.9829	0.04343	1.18683	0.8437	5.782	26.51017
CRI	11/28/00	3:43	20.61032	-16.7757	21.72237		408.78	10.27554	13.59531	10.61908	103.0909	19.871	51.42224	32.87479
ICSA	11/28/00	3:52	-0.50207	95776.52	4.73093		0.70346	0.44667	97981.8	-0.03007	0.24006	-1.27461	-1.77378	37873.89



Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
CCV	11/27/00	21:29	38075.87	26214.11	405.9158	3124.814	19347.82	610.4147	2063.182	10335.81	1019.338		2044.34	
CCVI	11/27/00	21:38	5571.236	-6.2349	-0.19144	2.64703	10.67638	-1.0615	1.29758	-3.22592	0.3164		1.33458	
CCB	11/27/00	21:46	620.4151	7.41225	-0.07043	1.06376	8.19316	1.11225	2.70095	-0.67757	-0.53537		-0.87419	
OK0P281002	11/27/00	21:55	121151	10082.83	87.24754	792.0034	5314421	-36.3325	160.8839	127.7068	82.65168		259.1456	
OK0P281003	11/27/00	22:03	130924.8	13529.49	133.9756	411.9968	2961730	-241.992	295.0479	-210.792	135.5116		-632.217	
OK0P281004	11/27/00	22:11	131581.8	12729.08	53.9055	477.6443	4299002	101.8255	249.3737	-242.615	1099.764		736.6624	
PB M3 11/20 I	11/27/00	22:24	539.0659	11.93154	0.07942	0.60733	9.42986	-0.25076	-0.38409	4.65953	2.67452		1.44602	
LCS	11/27/00	22:32	18317.08	2013.518	1893.299	1994.856	1898.225	1926.028	1937.864	1917.437	1777.627		1912.58	
LCS NA	11/27/00	22:40	592.5323	8.06232	0.1262	1.49323	20340.53	0.04589	0.44743	1.22007	4.20713		-4.02895	
OK0P504003	11/27/00	22:49	397934.5	411156.8	60712.84	14.85235	15976.87	264.7326	16.80265	5.03916	17.15291		-53.2377	
CRI	11/27/00	23:01	743.0196	11.38822	31.38065	0.66453	9.64979	83.50785	11.02791	126.5364	16.60855		19.9229	
ICSA	11/27/00	23:09	755.198	107903.3	1.70305	-0.03935	20.31885	0.94297	5.83501	3.22225	2.4038		1.68513	
ICSAB	11/27/00	23:18	38877.18	106646.3	396.5493	635.2351	10075.53	597.0855	2004.338	1039.289	986.5624		2013.627	
CCV	11/27/00	23:26	37220.64	25751.82	387.7158	3064.222	18821.25	593.0077	1996.985	10012.89	976.7959		1986.415	
CCV1	11/27/00	23:34	6059.361	8.18337	-0.14202	2.89564	22.56435	-0.53565	1.31912	-2.34304	-0.15356		2.99187	
CCB	11/27/00	23:43	689.3743	9.63937	0.00487	0.52152	4.82823	0.02821	1.03931	0.09408	1.68502		-2.68275	
PB M1 11/8 CC	11/28/00	0:02	673.3265	7.17275	0.27396	-0.2423	10.34376	-0.85592	1.13952	1.90997	3.34079		2.21222	
LCS	11/28/00	0:11	20081.23	2150.304	2037.993	2140.11	2093.729	2068.997	2075.753	2100.882	2022.834		2069.394	
LCS NA	11/28/00	0:19	553.258	5.09243	0.23297	2.85229	19888.83	0.59253	3.119	4.03811	3.52196		2.73541	
OK0P206001	11/28/00	0:27	12749.94	9957.526	140.5	459.1262	185475.4	5.81606	17.62916	2.87773	6.05186		-0.70131	
OK0P206003	11/28/00	0:36	12648.09	9496.86	104.1387	754.1781	146115.1	4.61862	12.00931	-1.62709	-0.42198		1.88821	
OK0P206004	11/28/00	0:44	2678.031	8111.213	5.48712	1.16487	22296.93	1.81822	2.633	-1.96904	6.45396		0.21403	
PB-M1 11/15 XX	11/28/00	0:56	455.5141	8.08421	0.24195	0.15895	85.0268	2.49583	0.76115	2.23949	-0.75266		-3.05822	
LCS	11/28/00	1:05	19756.95	2113.026	2025.91	2104.989	2206.117	2052.773	2060.546	2061.643	1987.604		2046.799	
OK0P408001	11/28/00	1:13	12648.85	3558.874	210.2086	2.32602	12001.01	3.17917	2.38666	0.65692	1.61415		1.07931	
OK0P408002	11/28/00	1:22	11286.62	3285.722	162.6225	1.03846	11656.09	2.57491	1.47275	-0.33288	1.9877		-8.81869	
CCV	11/28/00	1:46	38135.8	26107.39	396.4647	3117.91	19244.22	597.3313	2028.047	10196.59	998.7506		2005.164	
CCV1	11/28/00	1:55	5525.578	4.87885	-0.02895	3.33966	17.65431	-0.79876	1.23402	0.45884	1.6329		1.9194	
CCB	11/28/00	2:03	415.9698	0.82414	-0.16052	-0.12273	4.81359	0.02665	2.75212	-1.16117	2.47689		4.89196	
OK0P408003	11/28/00	2:12	10313.86	2762.794	1681.661	0.96276	4836.791	7.708	8.62879	-0.007	3.824		-4.65836	
OK0P408004 QC	11/28/00	2:20	9623.962	2033.441	245.7892	1.55191	4723.811	2.14551	2.72093	1.66763	-3.10351		0.29873	
OK0P408004 L	11/28/00	2:29	11424.41	2028.906	239.5522	4.70866	4767.302	4.38132	9.62432	-8.89127	5.83665		6.93901	
OK0P408004 MD	11/28/00	2:37	9326.086	1999.035	239.4005	0.81002	4668.927	1.31893	3.54446	-0.64184	7.75431		-2.18156	
OK0P408004 MS	11/28/00	2:45	28393.71	4291.431	2372.343	2206.724	6746.098	2174.516	2113.834	2178.545	2010.564		2135.419	
OK0P408004 MSD	11/28/00	2:54	27618.03	4061.189	2227.356	2070.913	6579.302	2035.26	2035.446	2049.198	1966.315		2015.904	
PB M3 11/16 B	11/28/00	3:10	405.0099	6.5847	-0.05658	0.86484	28.96767	0.00034	3.97962	-2.43071	1.84539		-5.16327	
LCS	11/28/00	3:18	18435.67	2001.748	1862.621	1995.782	1954.593	1928.49	1938.107	1905.63	1762.683		1910.469	
OK0P454001	11/28/00	3:26	3788.966	25597.11	523.5245	14.43306	9082.254	6.37053	2.16132	-1.25339	5.71265		1.66053	
OK0P454002	11/28/00	3:35	440.2482	47.58852	1.11425	1.03736	235.56	1.12487	1.94384	3.6372	-2.89254		1.86084	
CRI	11/28/00	3:43	456.0533	15.6295	29.25584	-0.2064	5.89855	80.03793	8.32482	122.6066	10.76599		20.56084	
ICSA	11/28/00	3:52	349.9426	103845	1.28904	-0.15895	14.761	0.74244	8.00693	0.72325	2.74523		6.19609	

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Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
CCV	11/27/00	21:29	605.6483	625.1794	6.96096	65258.5	2061.907	2063.819	1016.539	1020.736
CCVI	11/27/00	21:38	1.27822	2.94596	4954.959	58700.5	-2.57697	3.2317	0.32481	0.312
CCB	11/27/00	21:46	0.57696	2.65151	-2.40113	62367.5	0.29825	3.90027	-3.47164	0.93037
OKOP281002	11/27/00	21:55	134.4837	810.511	-201.523	65730.5	115.0439	183.724	-292.521	269.9201
OKOP281003	11/27/00	22:03	46.12651	426.8109	-129.336	63605	96.90093	393.9257	506.6406	-49.8123
OKOP281004	11/27/00	22:11	0.53616	417.5509	-385.046	63245	-71.8646	409.7046	1277.334	1011.073
PB M3 11/20 I	11/27/00	22:24	1.03106	1.27959	-1.311	63050	-2.42873	0.63645	-12.6672	10.3337
LCS	11/27/00	22:32	1911.645	1984.216	1884.227	61638	1941.296	1936.15	1791.947	1770.478
LCS NA	11/27/00	22:40	-0.00525	1.11672	-2.15085	61986	5.74086	-2.19555	-0.56843	6.59114
OKOP504003	11/27/00	22:49	15.14985	564.8565	37.1459	65550	18.25517	16.07724	42.54589	4.47527
CRI	11/27/00	23:01	104.2261	43.63381	614.9948	59522	9.32694	11.87688	13.65095	18.08493
ICSA	11/27/00	23:09	-0.13231	-1.27548	1.12051	58237	9.79375	3.85831	8.71347	-0.7465
ICSAB	11/27/00	23:18	603.7505	609.3922	982.8046	59373	2122.945	1945.124	1052.025	953.8801
CCV	11/27/00	23:26	579.364	620.7705	10.31434	59269.5	1964.215	2013.345	954.3535	988.0001
CCV1	11/27/00	23:34	-1.09286	3.2851	5050.042	51066.5	4.00237	-0.02077	2.15687	-1.30728
CCB	11/27/00	23:43	0.33321	2.40495	-2.0015	59738	0.94058	1.08835	2.38623	1.33474
PB M1 11/8 CC	11/28/00	0:02	1.40899	1.98927	-5.6145	59978	-4.11466	3.76242	-2.97578	6.49414
LCS	11/28/00	0:11	2051.806	2106.804	2056.665	64015.5	2073.382	2076.937	2017.142	2025.676
LCS NA	11/28/00	0:19	0.58681	1.76294	-4.42195	62196	2.51806	3.41877	0.77391	4.89373
OKOP206001	11/28/00	0:27	-0.19911	121.8543	-0.01406	61001.5	11.95082	20.46383	0.45923	8.84378
OKOP206003	11/28/00	0:36	-3.15625	84.8304	-0.80938	62193.5	17.26193	9.3867	2.53961	-1.90076
OKOP206004	11/28/00	0:44	2.2714	10.8891	-3.78007	64329	-4.71368	6.3006	2.51873	8.41844
PB M1 11/15 XX	11/28/00	0:56	0.12705	4.73549	0.23491	66958	5.60938	-1.65954	-5.48823	1.61139
LCS	11/28/00	1:05	2037.741	2094.855	2026.758	64415.5	2053.227	2064.2	1993.567	1984.627
OKOP408001	11/28/00	1:13	2.71498	98.93201	-0.05937	64528	-0.27315	3.71434	1.068	1.88663
OKOP408002	11/28/00	1:22	-0.3501	60.63404	-1.6228	63711	9.23911	-2.40483	3.27839	1.34313
CCV	11/28/00	1:46	591.5414	624.6706	4.69148	53447	2063.565	2010.314	1015.315	990.4804
CCV1	11/28/00	1:55	0.80401	3.685	5082.169	63220	-3.75036	3.72224	-6.78702	5.83637
CCB	11/28/00	2:03	0.99216	2.25854	-1.61409	66191	0.79521	3.72888	-4.50392	5.96188
OKOP408003	11/28/00	2:12	7.43979	204.1736	-0.79554	65232.5	4.50016	10.68978	0.20908	5.62857
OKOP408004 QC	11/28/00	2:20	2.77156	65.04206	-1.56785	57056	-8.56095	8.35315	-4.30575	-2.50351
OKOP408004 L	11/28/00	2:29	1.14401	68.91829	0.58851	68089.5	20.02218	4.43208	8.77919	4.36671
OKOP408004 MD	11/28/00	2:37	3.01696	53.92376	-0.33077	60008	-1.62367	6.1244	5.58434	8.83746
OKOP408004 MS	11/28/00	2:45	2151.281	2276.154	2053.054	59524	2167.544	2087.018	2087.669	1972.068
OKOP408004 MSD	11/28/00	2:54	2021.834	2124.292	1994.497	62805	2031.794	2037.27	1967.389	1965.779
PB M3 11/16 B	11/28/00	3:10	-0.09632	1.80919	-2.69049	65280.5	8.26524	1.83979	-2.37087	3.95018
LCS	11/28/00	3:18	1891.412	1980.69	1569.004	66549.5	1927.754	1943.275	1755.29	1766.374
OKOP454001	11/28/00	3:26	2.64887	31.83919	-2.61198	67425	-1.95135	4.21435	-2.0335	9.57975
OKOP454002	11/28/00	3:35	-0.41489	14.68625	-2.09911	65705.5	8.23621	-1.19784	-9.23122	0.27186
CRI	11/28/00	3:43	99.42697	41.97841	589.5448	65367	7.75584	8.60865	11.70339	10.29781
ICSA	11/28/00	3:52	0.61771	-1.13467	-0.59016	67035.5	2.90227	10.55516	7.23159	0.50523

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
ICSAB	11/28/00	4:00	624.3602	100710.2	2045.962		628.8768	205.9961	101787	610.3152	612.5596	600.4095	615.6721	39656.09
CCV	11/28/00	4:09	625.3002	25210.84	2077.601		630.5186	211.0403	26367.28	634.6191	651.6459	616.4425	622.1785	10159.52
CCV1	11/28/00	4:17	-0.4063	-16.7892	-0.10191		0.10465	0.4993	17.54813	-0.15129	0.32689	-0.14072	1.20158	6.78889
CCB	11/28/00	4:25	0.23255	-26.1802	0.25705		0.14035	0.53174	8.78259	0.00163	0.6844	-0.23867	0.53938	30.26687
OK0P454003	11/28/00	4:34	-0.27267	236.7269	0.24024		159.0697	0.52595	231543.1	-0.01587	1.2207	1.19746	3.28984	397.2913
OK0P454004	11/28/00	4:42	-0.44972	1269.116	0.85811		127.6477	0.69941	205170	-0.2201	1.11517	2.28697	3.06383	1723.858
OK0P454005	11/28/00	4:51	-0.51534	200.5912	1.41372		133.1636	0.39363	250506.3	-0.14208	1.00743	1.39384	3.25922	566.6985
OK0P454006 QC	11/28/00	4:59	-0.39819	316.2467	-1.17496		49.5552	0.52338	144832.1	-0.14891	-0.31142	2.00333	5.91421	593.399
OK0P454006 L	11/28/00	5:07	0.3743	212.5993	-5.50628		50.51207	1.96571	150832.8	0.21252	3.72438	1.39579	9.61255	642.9512
OK0P454006 MD	11/28/00	5:16	-0.16346	298.1688	-1.95422		50.6452	0.5605	153273.4	0.06438	-0.24643	1.82135	5.61798	660.3447
OK0P454006 MS	11/28/00	5:24	2028.703	2484.226	1996.584		2130.192	1997.871	152228.8	2002.023	2031.088	1952.423	2036.427	2640.769
OK0P454006 MSD	11/28/00	5:33	2038.129	2473.665	1996.266		2138.099	2030.082	155588.2	2042.477	2043.77	1980.415	2012.124	2690.886
OK0P231001	11/28/00	5:45	-0.72483	-20.7026	0.52674		99.46211	0.5082	180861.3	0.0432	1.84951	0.37514	625.7272	183.229
OK0P235001	11/28/00	5:53	-0.35412	-27.0174	-0.30346		65.61523	0.47352	219522.9	0.00239	0.54104	1.81518	3.19069	119.1098
CCV	11/28/00	6:02	610.5084	24473.46	2049.529		624.7145	207.6972	25863.32	629.4872	643.8342	592.6921	599.6338	9877.807
CCV1	11/28/00	6:10	0.09053	-29.9312	1.50186		0.25905	0.59458	17.20985	-0.02843	-0.00122	0.10743	0.97655	28.72519
CCB	11/28/00	6:18	0.36258	-31.1306	0.11443		-0.01592	0.65266	9.85063	-0.10121	0.59933	-0.05261	1.33044	2.5781
CRI	11/28/00	8:58	17.64829	-43.9889	19.03316		420.6421	11.02777	11.4048	10.28005	105.8116	18.09529	51.00121	31.73145
ICSA	11/28/00	9:05	-1.23229	96062.16	-1.43927		0.54607	0.91589	99791.84	0.23323	0.33665	-0.84106	-1.16843	38544.99
ICSAB	11/28/00	9:12	612.4072	97213.83	2058.429		622.6027	207.0087	101739.4	628.8884	622.6212	595.6836	605.9696	39350.07
CCV	11/28/00	9:22	620.5031	24949.84	2145.387		630.1588	217.4317	27215.51	671.5392	675.8909	627.2146	613.8344	10305.84
CCV	11/28/00	9:49	624.589	25690.41	2082.95		622.3702	210.476	26680.32	634.9559	637.516	627.8161	600.7526	10482.41
CCV1	11/28/00	9:56	-1.02232	0.66596	0.66673		-0.08887	-0.08449	12.9592	-0.38507	-0.34324	-0.38001	-0.1873	-2.01565
CCB	11/28/00	10:03	2.09579	16.85744	3.76529		-0.01756	0.0384	16.99667	0.40322	1.35936	2.20596	1.71094	6.49072
OK0P367002	11/28/00	10:24	1.40367	618.674	0.16689		930.9916	-0.3301	312397.6	23.89548	64.83288	7.21897	214.0243	281.2126
OK0P367003 MS	11/28/00	10:32	2021.736	2650.56	2035.443		10732.57	2006.642	312361.8	2091.197	2071.917	2041.468	2210.43	2490.679
OK0P367005	11/28/00	10:40	-13.6506	770.9446	-1.06591		951.1685	-0.27745	346733.3	20.3614	59.01465	-3.64223	184.6199	356.4796
PB M5 11/22 T	11/28/00	10:49	0.02504	188.5722	-6.65394		24.37633	0.06339	332.7217	0.10801	0.12942	1.74983	5.19012	70.37709
LCS	11/28/00	10:57	2051.685	2123.95	2101.859		9669.771	2042.268	2455.647	2150.492	2070.805	2066.09	1957.332	2203.482
OK0P579002	11/28/00	11:06	0.54864	2446.91	-4.51792		2598.65	0.38915	131022.8	176.3486	17.87435	38.07018	11.59389	2766.571
OK0P579003 MS	11/28/00	11:14	2209.355	4644.098	2204.027		12924.05	2216.799	143206.1	2427.406	2215.327	2423.357	2307.577	5142.47
OK0P579005	11/28/00	11:22	3.08261	1564.989	-4.10635		2377.972	0.39259	204438.8	115.5384	12.59023	26.04393	44.89159	1363.734
CCV	11/28/00	11:31	621.5594	25717.7	2117.546		620.0208	213.0608	27111.67	647.2504	643.8947	631.2168	598.1294	10643.87
CCV1	11/28/00	11:39	0.4746	12.84241	0.22042		-0.27942	0.20981	31.20077	0.14603	0.78331	0.88411	1.21285	-28.9965
CCB	11/28/00	11:48	-0.25031	2.90415	-0.37373		0.13085	0.04068	16.39775	-0.3294	0.65621	0.31821	0.20035	23.88799
PB M9 11/22 S	11/28/00	11:58	191.8796	2421.982	335.8074		12.25091	8.96907	2582.235	16.51444	89.96675	80.91365	107.0891	2018.671
LCS	11/28/00	12:06	201238.4	197905.7	190580		207951.4	202994.8	206225.2	197879.1	197081.6	204473.9	206058.8	203995.3
OK0P550001 QC	11/28/00	12:14	-8.98114	2896.743	1201.934		2889.615	-21.6488	45210.25	34.50154	97.01255	258.6366	4063.36	89822.81
OK0P550001 L	11/28/00	12:23	-204.848	229.1871	1592.734		2588.286	-14.5952	42571.7	-73.9893	178.3976	-14.6751	3361.789	90998.97
OK0P550001 MD	11/28/00	12:31	-10.3961	3364.911	834.0205		2935.922	-35.0757	45871.51	5.65764	42.08141	257.9367	4127.911	91274.02
OK0P550001 MS	11/28/00	12:40	159585.4	155938.2	146817.8		157824.2	147482.3	201360.9	145809	147588.9	150719.7	159962.8	238894.2

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Sample_Name	Date	Time	Potassium	agnesi	anganes	olybedenu	Sodium	Nickel	Lcad	Antimony	Selenium	Silicon	Titanium	Thallium
ICSAB	11/28/00	4:00	39396.19	108124.3	394.7512	637.6146	10356.53	593.5229	2039.41	1048.943	1005.485		2027.859	
CCV	11/28/00	4:09	39004.27	27169.26	403.5829	3219.408	19863.35	616.4038	2081.365	10541.6	1026.144		2088.457	
CCVi	11/28/00	4:17	5343.042	9.07294	-0.11769	2.46707	7.67423	-0.52563	1.38493	2.13299	-0.87652		5.84946	
CCB	11/28/00	4:25	556.9893	8.16811	0.30493	0.42554	5.14442	0.33076	1.11443	2.06894	2.41094		1.83406	
OKOP454003	11/28/00	4:34	1404.374	19330.78	98.61888	1.19242	2335.379	5.38516	1.81829	0.62359	5.01105		-0.55688	
OKOP454004	11/28/00	4:42	2003.02	16627.18	138.9649	0.64776	3018.133	5.22209	2.46455	-1.04285	3.97646		-4.45903	
OKOP454005	11/28/00	4:51	4275.703	19579.47	158.4202	1.57942	6442.868	4.23572	1.52148	-1.6948	4.40732		-2.27564	
OKOP454006 QC	11/28/00	4:59	5075.743	18899.02	21.35931	0.58272	8534.568	4.03864	3.94623	-0.05328	3.38799		-5.34214	
OKOP454006 L	11/28/00	5:07	7318.172	19697.86	22.26033	-1.83352	8952.07	9.23335	17.70494	-9.06071	21.82261		6.47162	
OKOP454006 MD	11/28/00	5:16	5107.056	20155.12	22.83297	-0.08597	8876.646	5.50729	2.58892	2.13323	3.02224		0.20887	
OKOP454006 MS	11/28/00	5:24	24509.99	22048	1952.839	2072.547	11059.34	1958.042	1976.633	2032.912	1848.431		1991.675	
OKOP454006 MSD	11/28/00	5:33	24540.53	22387.13	1980.682	2109.793	11070.62	1997.423	2012.896	2048.355	1861.379		2006.26	
OKOP231001	11/28/00	5:45	15850.36	24858.76	17.15698	0.94112	32479.42	0.77496	1.84838	-2.82132	8.39443		-0.40459	
OKOP235001	11/28/00	5:53	72491.3	14929.4	126.704	3.62161	115375.4	4.32954	3.32817	4.79065	1.33236		-4.70878	
CCV	11/28/00	6:02	38898.91	27026.81	392.0339	3203.33	19932.18	601.3427	1972.55	10410.32	958.1887		2050.927	
CCV1	11/28/00	6:10	5197.829	7.53769	-0.07276	3.04468	5.04909	-0.01246	2.11494	3.76105	-0.88143		2.93684	
CCB	11/28/00	6:18	380.5305	5.25526	-0.0224	0.98189	2.04076	0.99564	0.58541	0.10116	3.70265		1.30373	
CRI	11/28/00	8:58	252.7621	-9.41113	28.76308	-0.07038	0.81791	79.67182	6.94967	120.3415	13.31145		19.53933	
ICSA	11/28/00	9:05	209.2798	109092.6	1.14524	-0.03673	11.31599	0.32914	6.66703	1.78596	-1.94635		-3.21167	
ICSAB	11/28/00	9:12	38988.15	110197.5	391.1289	652.9589	10272.38	594.6958	2058.618	1050.343	998.1967		2038.386	
CCV	11/28/00	9:22	39372.72	28591.48	407.2758	3355.729	20176.89	630.1958	2101.368	10737.04	1010.201		2148.566	
CCV	11/28/00	9:49	37863.56	26547.46	421.8751	3148.178	19496.36	623.1142	2092.367	10430.35	1035.89		2077.395	
CCV1	11/28/00	9:56	5463.019	-0.095	-0.15964	5.22271	10.16587	-0.31354	3.37335	0.41446	1.67506		-2.95958	
CCB	11/28/00	10:03	489.6273	19.29448	0.28028	2.97061	6.31803	1.44496	1.52381	4.96817	-3.68973		-2.0584	
OKOP367002	11/28/00	10:24	7591.302	11819.12	3245.49	1.39137	774751.8	63.72564	66443.02	6.55097	32.12398		1.35725	
OKOP367003 MS	11/28/00	10:32	7684.229	13787.6	5263.265	2057.172	770682.8	2087.353	68479.86	2040.144	2113.575		1976.375	
OKOP367005	11/28/00	10:40	8508.541	12857.94	4009.128	2.60594	796045.6	61.31202	91241.08	-9.80894	16.35387		-12.8875	
PB M5 11/22 T	11/28/00	10:49	8177.909	76.81845	5.66226	-1.14747	267627.3	7.13837	4.98605	4.37772	7.92013		-3.63445	
LCS	11/28/00	10:57	7939.262	2108.221	2117.927	2135.432	261892.1	2085.495	2113.863	2041.952	2055.406		2068.051	
OKOP579002	11/28/00	11:06	5296.609	3528.288	4425.342	2.23107	251260.3	69.54002	46571.01	1.98161	9.10205		-6.63914	
OKOP579003 MS	11/28/00	11:14	5881.803	5979.177	6848.323	2285.509	318750.8	2264.132	52799.18	2175.816	2151.769		2158.307	
OKOP579005	11/28/00	11:22	4289.464	3422.102	2424.416	2.5295	266829.3	64.84244	37217.53	8.97402	9.634		-2.43541	
CCV	11/28/00	11:31	38242.02	26767.95	425.0132	3207.604	19595.68	629.3683	2135.38	10526.25	1051.35		2108.037	
CCV1	11/28/00	11:39	5409.523	12.9434	0.34546	3.33505	92.30307	0.47672	1.03774	4.14363	2.80483		-4.43829	
CCB	11/28/00	11:48	567.3033	5.62265	0.00351	1.20321	54.99435	0.13624	1.17698	-0.5046	3.17922		-0.82848	
PB M9 11/22 S	11/28/00	11:58	43469.39	1682.971	27.56257	219.9991	4690.359	162.2286	370.0351	615.7957	500.023		-727.162	
LCS	11/28/00	12:06	1615698	199185.7	202762.2	204177.3	202533.2	198517.6	195734	195078.9	177059		195338.9	
OKOP550001 QC	11/28/00	12:14	9566.217	7141.007	4499.646	228.7263	28893.75	559.2859	2468.925	250.7034	957.5474		302.4392	
OKOP550001 L	11/28/00	12:23	124696	7284.562	4064.788	-229.94	32300.22	773.5928	3184.205	-317.434	2081.928		2716.142	
OKOP550001 MD	11/28/00	12:31	7529.127	6910.721	4672.103	115.0482	29402.91	598.6169	2339.98	223.0635	1030.214		-283.42	
OKOP550001 MS	11/28/00	12:40	1355762	157121.7	156630.4	144320.7	186431.8	147296.5	146531.2	110000.6	141582.2		146877.5	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
ICSAB	11/28/00	4:00	602.7297	603.2435	974.1557	66090	2026.548	2045.831	1003.479	1006.487
CCV	11/28/00	4:09	605.7393	647.0214	7.54006	65614	2076.3	2083.893	1014.835	1031.79
CCV1	11/28/00	4:17	-0.42499	3.02734	4824.436	64676.5	5.26614	-0.55298	3.40703	-3.01528
CCB	11/28/00	4:25	0.57041	1.98482	-1.53622	64239.5	2.51097	0.41698	-0.35551	3.79192
OKOP454003	11/28/00	4:34	0.88672	23.33399	-3.8251	64703	2.6225	1.41656	1.16346	6.93177
OKOP454004	11/28/00	4:42	3.45268	34.02389	-2.9619	63401.5	-0.43949	3.91417	-5.59668	8.75568
OKOP454005	11/28/00	4:51	1.26381	26.15148	-3.15957	60532.5	0.34817	2.10701	-2.66704	7.939
OKOP454006 QC	11/28/00	4:59	1.25147	88.81774	-4.79107	61571.5	4.10662	3.86591	-1.99306	6.0743
OKOP454006 L	11/28/00	5:07	1.77729	102.0496	-5.89279	64752.5	23.43928	14.8409	33.74769	15.86808
OKOP454006 MD	11/28/00	5:16	0.8611	67.46769	-4.78397	67592.5	0.69597	3.53375	-0.39376	4.7275
OKOP454006 MS	11/28/00	5:24	1979.208	2050.444	1941.583	70772	1977.931	1975.985	1842.44	1851.421
OKOP454006 MSD	11/28/00	5:33	1995.225	2091.281	1983.358	65459.5	1998.109	2020.277	1852.349	1865.888
OKOP231001	11/28/00	5:45	0.44991	183.3685	0.86168	66201.5	0.39342	2.57454	3.10553	11.03474
OKOP235001	11/28/00	5:53	0.23495	16.16616	-3.98513	66270	5.68508	2.15126	2.5569	0.72083
CCV	11/28/00	6:02	586.8782	640.3069	10.95668	63566.5	2043.911	1936.923	995.4479	939.5869
CCV1	11/28/00	6:10	0.35547	2.97429	4885.576	72533	0.80576	2.76834	-1.92676	-0.35971
CCB	11/28/00	6:18	-0.43496	1.44171	-0.38236	69076	7.61614	-2.92489	3.04621	4.0302
CRI	11/28/00	8:58	99.30653	43.5043	599.6252	71513.5	8.91041	5.97056	15.19686	12.37
ICSA	11/28/00	9:05	-0.25774	-1.04355	-2.53344	72187.5	4.47196	7.76272	-0.56561	-2.63586
ICSAB	11/28/00	9:12	592.0058	625.624	983.9119	68323.5	2070.233	2052.818	1010.016	992.2955
CCV	11/28/00	9:22	606.8909	692.8015	11.51741	70774.5	2137.016	2083.57	1024.245	1003.189
CCV	11/28/00	9:49	621.3923	639.6776	7.35386	66834.5	2058.907	2109.071	1026.277	1040.689
CCV1	11/28/00	9:56	-1.30715	1.20562	5324.638	63687	2.57285	3.77276	-5.02201	5.01838
CCB	11/28/00	10:03	-0.43154	0.46192	3.09909	67100.5	9.01492	-2.21634	0.01022	-5.53711
OKOP367002	11/28/00	10:24	0.05854	7326.616	-3.67908	66389.5	66487.27	66420.92	21.35423	37.49987
OKOP367003 MS	11/28/00	10:32	2063.756	9344.271	2113.13	65942.5	68423.8	68507.86	2111.412	2114.654
OKOP367005	11/28/00	10:40	-1.03476	8749.98	-0.64854	63728.5	92973.69	90376.06	43.00393	3.04787
PB M5 11/22 T	11/28/00	10:49	-0.01079	31.0848	12.97433	66358	1.52	6.71626	4.45761	9.64862
LCS	11/28/00	10:57	2085.439	2227.195	2227.239	68573.5	2065.114	2138.201	2023.499	2071.336
OKOP579002	11/28/00	11:06	0.27001	5963.406	11.25389	68596	46739.23	46487.02	10.45192	8.42795
OKOP579003 MS	11/28/00	11:14	2239.147	8774.102	2339.481	59492.5	55582.9	51409.42	2308.441	2073.55
OKOP579005	11/28/00	11:22	0.9548	5428.451	12.90484	67008.5	37446.33	37103.3	13.80614	7.55087
CCV	11/28/00	11:31	625.8198	654.3027	6.74863	69442	2117.147	2144.483	1051.809	1051.12
CCV1	11/28/00	11:39	-2.5254	4.20351	5323.12	66974.5	9.33405	-3.10441	5.42181	1.49813
CCB	11/28/00	11:48	0.02438	7.97881	-1.5555	66087.5	2.82799	0.35248	2.76405	3.38631
PB M9 11/22 S	11/28/00	11:58	-44.8391	287.1906	-215.675	62963	-100.453	604.9026	-1396.72	1446.951
LCS	11/28/00	12:06	203438.5	193309.3	-558.682	61244.5	194205.5	196497.1	177991.4	176593.5
OKOP550001 QC	11/28/00	12:14	125.2911	22642.64	1649.067	69689	2488.226	2459.268	1062.178	905.2934
OKOP550001 L	11/28/00	12:23	122.5741	21418.53	687.9897	68398.5	4242.116	2655.933	4236.111	1006.363
OKOP550001 MD	11/28/00	12:31	94.42498	23073.18	1809.263	70170.5	2222.372	2398.674	714.8688	1187.634
OKOP550001 MS	11/28/00	12:40	145368.8	164425.7	526.4304	69565	147150.3	146222	143374.1	140687.6

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
OKOP550001 MSD	11/28/00	12:48	162097.9	159092.8	150131.4		160229.8	151199.4	206844.4	149774.5	151547.2	154182.8	161466.6	244779
PB M6 11/14 TT	11/28/00	12:56	-47.5667	14258.51	-274.54		301.7068	-12.2489	45791.67	19.80325	6.73486	137.5443	399.0804	46463.26
LCS	11/28/00	13:05	173259.8	218449.1	163908.5		176767.2	167533.2	214245	167535.6	168380	173821.9	172779.8	221648.4
LCS (NA)	11/28/00	13:13	-45.8722	18839.38	-170.527		263.9029	-2.91422	41373.32	28.81889	20.5559	12.38626	346.1686	47853.87
CCV	11/28/00	13:22	650.4195	26791.76	2117.825		652.2397	214.594	27084.56	636.0436	646.1868	642.9215	633.3889	10710.12
CCV1	11/28/00	13:30	-1.7295	2.19376	-3.76088		0.24938	-0.215	11.95062	-0.38189	-0.64738	-1.59044	-1.13859	26.21255
CCB	11/28/00	13:38	0.33236	10.37256	-0.04808		0.0226	-0.19335	6.41246	0.04915	0.84403	0.45776	0.42986	7.74899
OKOP310002	11/28/00	13:47	-96.0161	2857207	2478.131		37325.04	207.3098	2958545	905.7354	2748.389	10857.63	215503	5266509
OKOP310010	11/28/00	14:13	237.8653	2472763	1073.07		41693.33	312.0152	9950842	1362.082	3605.034	21188.51	71856.99	5983680
OKOP310011	11/28/00	14:21	522.1544	3993190	2196.804		84349.63	212.9614	3362853	1595.564	7385.044	37495.67	97449.63	11458775
OKOP310012	11/28/00	14:30	66.30484	4144422	1799.042		121830.5	283.933	6469725	2292.686	5534.647	33034.96	87802.02	12316585
OKOP310013	11/28/00	14:38	116.5073	2406394	1207.712		28703.34	110.7589	3432982	388.1124	3350.243	15777.94	28736.37	5160763
OKOP310014	11/28/00	14:47	221.0778	4044412	2302.494		82498.86	223.6589	7670121	961.3239	5889.215	30523.51	55685.63	11126718
OKOP310015	11/28/00	14:55	411.3025	3404814	11880.99		112551.5	194.3383	5302803	2209.186	3558.913	34327.67	87351.3	7182543
OKOP310016	11/28/00	15:03	13834.12	2426723	4509.85		58380.55	143.126	2239875	1488.762	2804.878	18986.71	55680.23	6792188
OKOP367001	11/28/00	15:12	276.9901	10411791	26006.12		129166.6	357.3381	8521736	1297.139	21061.61	53203.59	108870.2	29907716
OKOP367004	11/28/00	15:20	87.53038	8767620	15132.43		104818	271.5084	10223212	989.1027	14904.33	45833.05	106670.6	24955212
CCV	11/28/00	15:29	623.863	25794.66	2029.97		622.8108	204.4552	25963.43	610.4287	619.1191	616.0796	606.1918	10242.33
CCV1	11/28/00	15:37	-0.02461	4.75296	-0.22357		0.60726	-0.05836	12.11764	0.03376	0.48746	-0.54928	-0.41228	16.58817
CCB	11/28/00	15:45	0.06879	-1.36143	0.61766		0.16133	0.01153	9.46021	0.09507	0.32226	0.2961	0.18884	31.68165
OKOP367004 L	11/28/00	15:54	-70.7251	8788733	14607.89		104857	314.2865	10531648	1070.593	15991.23	45754.95	105316.6	25454928
OKOP367004 MD	11/28/00	16:02	261.9329	8193723	15896.79		128615.1	271.105	9961556	1174.839	17632.59	53071.32	93637.55	32495820
OKOP367004 MS	11/28/00	16:11	173412.9	9293404	178401.9		311101.1	168190.5	10658452	165514.3	181827.6	212861.4	258129.8	20414330
OKOP367004 MSD	11/28/00	16:19	175333.8	9313706	185157.9		332509.8	169357.7	9864470	166606.7	190970.2	253651.3	577859.8	32818476
OKOP579002	11/28/00	16:31	-3.85917	2496.082	-11.3911		2691.126	-0.27828	132054.8	173.6625	17.27875	32.60241	8.15034	2983.03
OKOP579003 MS	11/28/00	16:39	2166.596	4617.692	2111.026		13392.44	2082.576	135576.3	2276.235	2119.171	2126.53	2120.461	4925.972
OKOP579005	11/28/00	16:47	-2.54233	1524.747	-10.3955		2402.524	-0.45489	193102	108.6431	11.13255	20.08702	41.21486	1363.834

Sample_Name	Date	Time	Potassium	agnesi	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
OKOP550001 MSD	11/28/00	12:48	1375865	161172.7	160636.7	148089	188790.2	151343.8	150557.4	112394	145513.4		149826.2	
PB M6 11/14 TT	11/28/00	12:56	45562.85	12113.31	227.8275	227.6273	29420.03	105.5411	409.3325	201.8632	165.5444		-716.071	
LCS	11/28/00	13:05	1606737	182137.7	172627.4	168382.8	193950.1	169304.1	169514.8	166161.4	155375.9		166617.8	
LCS (NA)	11/28/00	13:13	36092.57	10264.44	213.4167	107.8308	1653405	163.5927	464.2082	-16.0969	199.1386		-434.098	
CCV	11/28/00	13:22	39278.09	26906.76	430.5699	3235.24	20214.98	633.27	2105.096	10780.62	1044.673		2122.529	
CCV1	11/28/00	13:30	5358.675	-8.66	-0.20197	2.12208	18.93223	-0.6845	1.32157	-3.65946	0.80833		6.04671	
CCB	11/28/00	13:38	530.8881	3.81874	-0.04891	1.11514	17.57554	0.65327	1.89023	-0.67527	2.63803		-0.99512	
OKOP310002	11/28/00	13:47	302271.7	1248351	41075.99	1514.903	49603.57	8530.445	58402.27	2353.853	427.0777		-1.24224	
OKOP310010	11/28/00	14:13	315968.6	4682902	65203.47	3864.25	90279.02	19701.71	88851.72	3771.567	797.3884		3546.372	
OKOP310011	11/28/00	14:21	449286.1	2338706	112177.3	4048.181	171471.4	24528.61	135410	2829.892	-105.356		338.4938	
OKOP310012	11/28/00	14:30	514680	3749957	117197.8	4267.092	197974.1	25210.57	81431.73	3070.186	167.433		466.1465	
OKOP310013	11/28/00	14:38	381701.3	1271040	44475.58	1345.46	92035.87	11654.21	38785.08	1893.405	204.0912		-122.988	
OKOP310014	11/28/00	14:47	576580	4032406	171079.5	3542.494	167665.3	23275.8	1993525	2582.418	107.8371		441.753	
OKOP310015	11/28/00	14:55	459847.6	1524373	128698.6	1357.002	84817.94	15652.77	78635.58	4864.299	576.7249		133.1659	
OKOP310016	11/28/00	15:03	262986.7	1096707	28698.83	1911.975	102194.9	14577.96	126151.5	2846.067	381.1532		60.34171	
OKOP367001	11/28/00	15:12	584186.2	2838793	255377.4	1442.621	145695.3	19606.02	1519746	2235.789	1438.825		1977.083	
OKOP367004	11/28/00	15:20	553484	3074778	192863.8	1404.703	126196.3	17544.14	3089436	1504.163	739.6344		1181.704	
CCV	11/28/00	15:29	37645.93	25712.51	414.827	3079.807	19382.27	605.0701	2052.178	10326.4	1021.597		2040.199	
CCV1	11/28/00	15:37	5310.186	4.8119	-0.01856	2.88502	6.2885	-1.27373	1.43133	1.15644	-1.17681		1.15884	
CCB	11/28/00	15:45	375.2156	5.17272	-0.01935	1.27052	9.45582	0.72001	3.09194	-0.45147	0.83073		2.29186	
OKOP367004 L	11/28/00	15:54	739933.3	3184269	193543.5	1515.663	127456.2	18465.53	3143798	1964.704	1724.312		2227.181	
OKOP367004 MD	11/28/00	16:02	604883.8	3747155	1238355	1171.195	130640.1	17370.1	4837539	1778.932	819.7722		1339.003	
OKOP367004 MS	11/28/00	16:11	2174409	4289861	354343.9	168955.2	320504.1	181946.8	3432617	123401	148704.3		165028.6	
OKOP367004 MSD	11/28/00	16:19	2119660	2994030	444386.9	170398.2	325514.9	188576.3	8222456	105420.5	149319.3		167071.4	
OKOP579002	11/28/00	16:31	6631.932	3610.883	4428.996	2.26535	837886.3	70.83245	46566.95	-9.68315	20.14365		10.28432	
OKOP579003 MS	11/28/00	16:39	6548.796	5768.478	6585.112	2154.213	851851.6	2153.274	49577.91	2136.624	2187.268		2105.188	
OKOP579005	11/28/00	16:47	4991.356	3298.068	2323.231	4.58782	779807.6	57.59	34845.96	-13.4855	17.22582		-6.77394	

Sample Name	Date	Time	Vanadium	Zinc	Tin	Y	2203/1	2203/2	1960/1	1960/2
OK0P550001 MSD	11/28/00	12:48	148363.6	169245.5	715.3408	69260	150826.2	150423.2	146023.5	145258.7
PB M6 11/14 TT	11/28/00	12:56	87.38425	925.5786	3029.534	63660	61.20008	583.1146	-782.218	638.6968
LCS	11/28/00	13:05	172326.2	166507.9	173115.2	62547.5	170192.4	169176.4	157359	154385.8
LCS (NA)	11/28/00	13:13	54.16159	1269.564	2675.009	66949	-152.23	771.9431	-1066.54	831.0112
CCV	11/28/00	13:22	641.9959	630.8226	5.18214	62285.5	2078.545	2118.352	1044.767	1044.625
CCV1	11/28/00	13:30	0.2392	3.13781	5319.641	65729.5	-0.43372	2.19767	-2.03662	2.22849
CCB	11/28/00	13:38	0.1194	3.09903	-1.55981	63249.5	6.96984	-0.646	2.64066	2.63653
OK0P310002	11/28/00	13:47	14791.17	1340444	5690.748	67148	58412.06	58397.36	-236.593	758.3981
OK0P310010	11/28/00	14:13	21382.33	714119.5	7961.829	68223.5	72414.25	97058.11	-1210.44	1799.78
OK0P310011	11/28/00	14:21	31042.41	877627.8	11154.47	66239.5	135259.3	135485.1	94.21396	-205.01
OK0P310012	11/28/00	14:30	30807.51	1695303	9017.15	68156	82181.38	81057.45	384.8163	58.88705
OK0P310013	11/28/00	14:38	15706.86	306957	4964.333	66320.5	38650.76	38852.12	-510.81	560.9879
OK0P310014	11/28/00	14:47	31748.45	517003.4	8591.098	68493.5	1992116	1994228	-17.6296	170.4575
OK0P310015	11/28/00	14:55	15869.35	464462.8	26962.71	67883	78655.13	78625.8	428.9352	650.4913
OK0P310016	11/28/00	15:03	12933.11	855671.3	8186.233	70371.5	125705.7	126374	-40.9238	591.858
OK0P367001	11/28/00	15:12	22706.17	926975.2	8975.768	68375.5	1503096	1528058	2612.775	852.7131
OK0P367004	11/28/00	15:20	21931.64	782001.5	8883.363	68064.5	3092884	3087715	1773.443	223.4879
CCV	11/28/00	15:29	615.4359	603.3729	6.81475	68212	2025.225	2065.634	1020.194	1022.297
CCV1	11/28/00	15:37	0.23493	3.21657	5222.424	66363.5	1.07836	1.60732	0.24161	-1.88514
CCB	11/28/00	15:45	0.66713	4.46012	0.78838	66734	2.41718	3.42859	-0.4459	1.46791
OK0P367004 L	11/28/00	15:54	22052.02	837280.8	9256.109	67992	3198327	3116575	2939.339	1117.623
OK0P367004 MD	11/28/00	16:02	24243.47	885189.5	6987.321	65843.5	4790115	4861215	1642.802	408.8563
OK0P367004 MS	11/28/00	16:11	192383.6	975863.1	178469.3	64188.5	3406107	3445852	150054.4	148030.3
OK0P367004 MSD	11/28/00	16:19	194078.4	1541881	181970.8	65354	8208989	8229179	151791.3	148085.1
OK0P579002	11/28/00	16:31	7.20084	5890.166	-1.50457	64343	46973.16	46364.15	-25.591	42.97575
OK0P579003 MS	11/28/00	16:39	2161.98	7999.241	2148.103	64007.5	49273.07	49730.12	2183.199	2189.298
OK0P579005	11/28/00	16:47	0.06223	4957.383	-4.731	65484	34622.09	34957.72	13.33554	19.16713

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
BLANK	11/28/00	22:32	0.00034	-0.00061	0.00039		0.00034	-0.00476	0.00224	0.00048	0.00003	0.00006	0.00134	0.00013
STD 3	11/28/00	22:39	0.27304	0.03413	0.22831		0.25661	0.11404	0.33012	0.53848	0.09526	0.12464	0.14488	0.03553
STD 4	11/28/00	22:46	0.55038	0.06977	0.46121		0.51719	0.23551	0.66167	1.08108	0.1926	0.24787	0.28616	0.07182
STD 5	11/28/00	22:53	1.13034	0.14345	0.93592		1.05552	0.48537	1.35293	2.18366	0.39359	0.5016	0.57681	0.14641
STD 6	11/28/00	23:00												
STD 7	11/28/00	23:05												
STD 8	11/28/00	23:09												
STD 5	11/28/00	23:15	1503.819	24956.4	5044.369		1493.036	505.687	25294.19	1516.584	1508.355	1491.541	1474.58	10081.54
STD 8	11/28/00	23:21	-1.48386	-4.07971	-1.60862		-0.39684	0.25127	30.89342	-0.2349	-0.88135	0.79366	0.70772	-52.4614
ICV	11/28/00	23:28	1951.341	1895.013	1943.56		1942.305	1930.913	1989.835	1972.427	1969.811	1939.571	1912.284	1968.586
ICV1	11/28/00	23:35	0.47836	1.00511	1.90591		0.15091	0.37025	25.72907	0.2973	0.67588	2.01128	1.46794	-13.1041
ICB	11/28/00	23:42	-1.38705	-10.2147	-0.82471		-0.34756	0.59938	0.23261	-0.06814	-0.95652	1.6472	1.39038	-18.8726
ICB	11/29/00	0:01	-1.14564	-4.15879	-1.24681		-0.26392	0.2909	1.45593	-0.04955	0.11534	1.5547	0.93836	-29.6925
CCV	11/29/00	0:08	603.1215	25135.17	2076.094		602.308	207.4141	25978.91	626.254	630.1913	614.4267	594.1763	10296.62
CCV1	11/29/00	0:15	-0.80524	-12.5327	-2.19082		-0.07247	0.14989	8.84269	-0.25377	-0.76495	0.53871	1.02119	-30.1588
CCB	11/29/00	0:33	0.6966	0.83129	1.84261		0.99551	0.17337	3.43654	0.26061	1.23794	3.14191	2.38375	89.2644
CRI	11/29/00	0:40	19.1343	0.77148	21.25638		397.3976	10.53296	3.75352	10.4971	102.8477	21.20069	49.81296	3.53176
ICSA	11/29/00	0:47	-0.92824	96588.18	-2.35504		0.23518	0.49626	97453.79	-0.23095	0.04746	0.13761	-1.67218	38978.77
ICSAB	11/29/00	0:54	602.4097	100209.3	2034.953		593.8151	202.1506	100814.6	602.3291	593.6699	602.4358	597.0001	40229.64
PB M6 11/20 G	11/29/00	1:12	114.9414	11197.92	-273.926		288.3314	20.89241	43244.08	45.29427	59.41096	266.3378	502.8463	42629.86
LCS	11/29/00	1:21	182277	229895.2	175498.5		188086.1	177838.3	218816.7	182234.6	181274.3	181711.1	175480.4	252601.3
OKOP367009 MS	11/29/00	1:29	181513	12219876	197638.1		297580	176113	10035707	176454	197659.3	231030.8	277582.2	38845816
OKOP367010 MD	11/29/00	1:39	49.81225	10117500	18167		120747.9	355.6816	15406148	1187.241	19053.96	49883.13	141605.4	27074064
PB M1 11/21 M	11/29/00	1:51	-1.21771	-2.3974	-6.4652		-0.0066	0.22933	31.57973	-0.23722	-0.38649	1.39953	1.3208	23.12627
LCS	11/29/00	2:00	1951.818	1913.045	1680.283		1939.501	1667.85	1749.325	1720.802	1689.321	1703.984	1644.183	1690.979
OKOP500001	11/29/00	2:08	-0.90437	1438.18	-6.16937		56.46002	0.45369	89237.02	0.14847	39.71136	27.43099	26.4327	1168.874
PB-M1 11/10 NN	11/29/00	2:20	-1.22482	14.13315	-7.53613		1.18822	0.2928	66.91324	-0.23694	-0.44778	1.9664	1.69612	1.83049
LCS	11/29/00	2:29	2047.241	2005.046	2089.695		2041.165	2084.52	2186.753	2157.474	2127.589	2106.583	2031.75	2140.611
OKOP267001	11/29/00	2:37	-0.36213	98.26782	-7.20502		13.54286	0.60816	27037.02	0.04906	-0.03983	2.54427	11.15357	126.1142
CCV	11/29/00	2:45	595.8865	24688.71	2042.655		593.6447	206.8658	26019.66	626.389	629.7239	610.3124	584.0226	10177.75
CCV1	11/29/00	2:54	-0.12298	-12.8998	-6.08396		-0.0489	0.2463	12.45002	-0.41027	-0.52365	0.91815	1.64011	-16.6377
CCB	11/29/00	3:02	-0.57111	-5.44352	-7.31659		-0.11892	0.5069	1.63311	-0.31845	-0.27732	0.73343	0.45424	-17.7254
OKOP267001 L	11/29/00	3:11	-1.2228	25.4603	-35.1882		12.7903	1.93622	26637.83	-1.32939	-1.07172	5.6961	15.46257	22.84091
CCB	11/29/00	3:19	-0.77843	-17.7614	-3.84462		-0.15412	0.25452	2.78969	-0.48329	-0.18006	0.81337	0.55338	1.15869
OKOP267001 L	11/29/00	3:30	-3.52731	42.89523	-29.76		12.90499	1.83391	26856.31	-0.92724	-3.17817	3.98198	12.67597	84.36863
OKOP267001 MD	11/29/00	3:39	0.42477	100.5646	-5.33938		12.78081	0.37726	25718.84	0.00731	0.35058	3.22535	11.50528	101.4398
OKOP267001 MS	11/29/00	3:47	2074.874	2141.023	2113.77		2083.192	2108.312	28843.79	2145.226	2139.347	2087.312	2056.282	2274.429
OKOP267001 MSD	11/29/00	3:55	2134.536	2213.512	2160.13		2166.327	2161.452	30151.13	2191.06	2196.58	2168.034	2146.116	2384.633
OKOP294002	11/29/00	4:08	-0.926	42.22156	-3.39591		9.29656	0.46805	34220.74	-0.47477	0.12772	2.25711	3.28592	80.58099
OKOP367004	11/29/00	4:22	-2.52417	85546.73	148.3741		1005.318	4.60672	106419.4	9.75303	160.2352	466.2567	1030.505	258127.1
OKOP367004 MD	11/29/00	4:31	-0.7673	79788.99	149.8433		1211.395	4.5852	102611.8	11.18921	184.8506	533.3774	884.5076	333448.1

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
BLANK	11/28/00	22:32	0.58538	0.00026	0.0001	0.00085	0.06547	0.00035		0.00046			0.00027	
STD 3	11/28/00	22:39		0.2252	0.09138	0.12886	2.07595	0.15458		0.23412			0.12119	
STD 4	11/28/00	22:46		0.45456	0.18532	0.25992	4.1136	0.3103		0.47397			0.24589	
STD 5	11/28/00	22:53		0.93896	0.37798	0.53031	8.31965	0.62738		0.96523			0.50315	
STD 6	11/28/00	23:00	1.24073											
STD 7	11/28/00	23:05	1.83922											
STD 8	11/28/00	23:09	3.14883										5082.649	
STD 5	11/28/00	23:15	85880.07	25308.24	1009.549	3023.108	9947.1	1512.503	5058.438	10069.17	2513.655		-3.93125	
STD 8	11/28/00	23:21	9792.303	-8.47928	-0.12709	3.03847	36818.76	-1.16601	-0.75231	-2.42287	2.76523		2957.325	
ICV	11/28/00	23:28	18523.99	1990.363	1947.496	1965.778	1950.174	1961.32	1937.452	1949.332	1920.231		-6.73536	
ICV1	11/28/00	23:35	399.9376	7.13062	0.32186	1.21656	9629.641	0.99728	0.14384	-1.26254	0.15054		-7.16626	
ICB	11/28/00	23:42	92.57049	-6.91559	-0.17829	-2.70003	0.5274	-1.77199	0.29568	0.83476	3.92937		-7.88966	
ICB	11/29/00	0:01	125.2839	-8.87943	0.00278	-3.70111	3.7508	-0.31149	-0.93604	-2.06958	1.34601		2077.169	
CCV	11/29/00	0:08	37434.82	25996.63	410.1174	3085.095	19449.59	619.4698	2064.688	10268.13	1019.247		-7.29944	
CCV1	11/29/00	0:15	5055.127	-3.24889	-0.1749	1.97073	9.44859	-1.0137	-0.32228	-3.53992	4.21699		-4.76051	
CCB	11/29/00	0:33	317.5895	11.98758	0.13015	-1.95035	8.16939	0.70149	-2.30333	3.50428	0.31324		12.43855	
CRI	11/29/00	0:40	244.6161	2.54078	30.63488	-3.90294	5.89257	84.28758	3.46795	121.5013	11.23261		-11.8374	
ICSA	11/29/00	0:47	-94.3296	100843.7	1.17469	-3.58342	2.6542	1.12568	2.39035	-2.42217	2.90497		2003.298	
ICSAB	11/29/00	0:54	37444.13	103777.5	401.5024	605.137	9998.073	597.4092	2005.629	1015.404	990.2905		-580.979	
PB M6 11/20 G	11/29/00	1:12	53466.46	12635.22	229.3314	-317.754	28568.87	196.3139	92.432	402.3748	15.75917		177367.3	
LCS	11/29/00	1:21	1694181	192359.9	181057.9	176629.9	208227.3	181865.5	181753.3	172931.3	162507		172708.2	
OKOP367009 MS	11/29/00	1:29	2238177	4017778	3176133	175198.8	324542.7	202109.1	1765459	134634	154601		781.5944	
OKOP367010 MD	11/29/00	1:39	646048.6	6191321	195788.3	1291.316	146897.1	18984.26	3818895	1251.103	725.6754		-8.80214	
PB M1 11/21 M	11/29/00	1:51	230.6183	-3.65491	0.22156	-4.31204	30.1525	-0.36818	-0.74173	-0.55644	2.95876		1681.985	
LCS	11/29/00	2:00	18606.38	1707.015	1659.29	1682.352	1981.337	1700.224	1706.654	1656.818	1641.514		-10.6299	
OKOP500001	11/29/00	2:08	2989.687	25145.92	76.53655	0.56875	48876.12	5.87987	-2.49445	-2.71952	3.74949		-5.66726	
PB M1 11/10 NN	11/29/00	2:20	280.6923	1.72773	0.15435	-4.16744	15.91998	-1.4542	-2.19077	-3.54657	5.01991		2100.047	
LCS	11/29/00	2:29	19422.46	2161.513	2076.581	2129.897	2082.716	2120.778	2123.097	2075.877	2038.229		-11.719	
OKOP267001	11/29/00	2:37	11895.1	8261.662	22.20969	0.20027	50592.32	1.94024	1.20104	-1.20071	2.37492		2046.332	
CCV	11/29/00	2:45	37271.02	26040.85	402.5222	3068.28	19392.01	611.8961	2052.866	10115.49	1000.614		-9.49594	
CCV1	11/29/00	2:54	5182.01	0.1216	0.07774	0.84446	16.82649	-0.92049	-0.1629	-0.01161	1.90943		-8.94414	
CCB	11/29/00	3:02	315.6611	-8.73335	-0.15023	-3.56029	4.31846	-1.23474	-1.94068	-1.94	-2.8877		-45.8757	
OKOP267001 L	11/29/00	3:11	14460.48	8125.832	21.01263	-16.4279	55648.8	-2.29868	-19.9878	1.84103	5.90527		-9.41815	
CCB	11/29/00	3:19	324.6234	-2.03948	-0.16914	-3.79796	5.24233	0.07829	0.90184	-1.8105	2.89606		-40.3	
OKOP267001 L	11/29/00	3:30	14370.23	8172.84	22.17451	-23.8001	55305.54	-1.3117	-4.3845	4.60987	16.34742		-7.15005	
OKOP267001 MD	11/29/00	3:39	11238.48	7876.073	21.19676	-3.23956	48213.87	2.89796	0.06753	5.20538	2.20688		2119.822	
OKOP267001 MS	11/29/00	3:47	30572.86	10311.07	2121.303	2128.35	51267.77	2141.068	2137.039	2083.086	1985.873		2160.553	
OKOP267001 MSD	11/29/00	3:55	31905.51	10768.67	2176.165	2203.463	54142.29	2192.813	2196.558	2139.584	2046.96		-3.79705	
OKOP294002	11/29/00	4:08	22946.54	9682.628	36.61443	36.84259	146537.4	1.20051	-0.33312	-5.43389	2.15898		-29.6856	
OKOP367004	11/29/00	4:22	7318.27	32337.49	1919.838	-4.64882	1326.775	179.4588	33143.4	-11.7347	-13.0617		2.44659	
OKOP367004 MD	11/29/00	4:31	7559.084	38892.68	12475.21	-9.55304	1332.355	175.388	49887.91	2.9558	13.46202			

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
BLANK	11/28/00	22:32	0.00009	0.00018	0.00017	59441.5	-0.00178	0.0008	-0.00142	0.00054
STD 3	11/28/00	22:39	0.02613	0.04215		56032.5	0.97712	0.2382	0.0862	0.07113
STD 4	11/28/00	22:46	0.05281	0.08455		55636	1.8975	0.47892	0.16818	0.14198
STD 5	11/28/00	22:53	0.10787	0.17247		54006.5	3.83214	0.98522	0.33719	0.29239
STD 6	11/28/00	23:00			0.36819	56459				
STD 7	11/28/00	23:05			0.74	57697				
STD 8	11/28/00	23:09			1.529	51018.5				
STD 5	11/28/00	23:15	1510.47	1522.113	13.81546	54809	5047.998	5063.652	2506.22	2517.367
STD 8	11/28/00	23:21	-2.58902	0.04702	10089.09	57727	8.72961	-5.48641	11.22835	-1.46019
ICV	11/28/00	23:28	1951.867	1991.4	6.40714	55090.5	1966.523	1922.939	1955.949	1902.398
ICV1	11/28/00	23:35	-0.71083	0.71837	2039.558	54746.5	6.65658	-3.10792	2.36026	-0.95287
ICB	11/28/00	23:42	-2.29734	-0.45343	0.00262	59944	5.11272	-2.10947	12.80052	-0.49974
ICB	11/29/00	0:01	-1.94325	-0.82791	2.75525	59994.5	12.03894	-7.41405	13.64031	-4.79212
CCV	11/29/00	0:08	605.9369	635.2463	9.53626	58224	2076.417	2058.832	1030.898	1013.431
CCV1	11/29/00	0:15	-1.97271	0.4666	5167.606	56631	3.05548	-2.00889	7.12316	2.76587
CCB	11/29/00	0:33	4.10872	1.70022	3.18972	57063.5	2.05347	-4.47873	7.85412	-3.45174
CRI	11/29/00	0:40	101.6721	43.06326	641.6573	58552	4.40087	3.00193	13.65138	10.02484
ICSA	11/29/00	0:47	-1.50034	-3.04911	0.39696	63693	3.1784	1.99668	11.97244	-1.62214
ICSAB	11/29/00	0:54	599.7819	599.9213	1005.001	59704.5	2060.733	1978.118	1018.202	976.3554
PB M6 11/20 G	11/29/00	1:12	16.91712	1358.445	3233.699	54738.5	1111.296	-416.264	-601.662	323.9848
LCS	11/29/00	1:21	179389.3	187048.5	191286.9	55755.5	182683.5	181288.8	161432.1	163043.7
OK0P367009 MS	11/29/00	1:29	209561.3	1128741	193173.9	58517	1767014	1764683	157805.8	153001
OK0P367010 MD	11/29/00	1:39	21055.68	1025771	9144.22	57327	3853608	3801564	2358.866	-89.7167
PB M1 11/21 M	11/29/00	1:51	-0.5021	1.73098	-0.92806	57806.5	2.25575	-2.23849	-2.53472	5.70118
LCS	11/29/00	2:00	1659.323	1750.677	2058.197	57324.5	1753.26	1683.385	1686.949	1618.83
OK0P500001	11/29/00	2:08	1.74145	56.54939	0.38226	56523	0.41092	-3.94523	5.20769	3.02127
PB M1 11/10 NN	11/29/00	2:20	-1.36263	2.20689	0.07866	57575.5	2.87408	-4.71966	9.67513	2.69558
LCS	11/29/00	2:29	2068.537	2199.107	2157.473	57696.5	2142.611	2113.354	2053.324	2030.692
OK0P267001	11/29/00	2:37	-0.98114	202.637	-0.01586	54836	7.89837	-2.14286	1.14925	2.98661
CCV	11/29/00	2:45	597.3973	642.1356	7.16914	53212.5	2080.96	2038.84	1008.21	996.8212
CCV1	11/29/00	2:54	-1.48694	2.70651	5140.62	54933	7.81155	-4.14443	9.15945	-1.71035
CCB	11/29/00	3:02	-0.86815	0.9667	2.13012	57790	0.49174	-3.15534	-0.72627	-3.967
OK0P267001 L	11/29/00	3:11	-4.25985	200.017	12.92764	55138.5	18.16241	-39.0357	39.37673	-10.8064
CCB	11/29/00	3:19	-0.86813	-0.25668	0.62116	57139	4.24498	-0.76748	4.55051	2.06987
OK0P267001 L	11/29/00	3:30	-4.92692	201.0244	-5.32249	56140	8.84216	-10.9893	48.55516	0.26663
OK0P267001 MD	11/29/00	3:39	-1.11935	192.0863	3.66897	58869	8.09875	-3.9423	2.46679	2.07691
OK0P267001 MS	11/29/00	3:47	2105.316	2411.786	2175.598	59572	2150.449	2130.344	1989.923	1983.851
OK0P267001 MSD	11/29/00	3:55	2159.966	2459.55	2219.357	57727.5	2199.622	2195.028	2049.352	2045.766
OK0P294002	11/29/00	4:08	1.00347	55.63351	0.65361	56940	1.2116	-1.10459	3.78043	1.34926
OK0P367004	11/29/00	4:22	212.4986	8981.906	92.3466	58171	33485.09	32972.81	27.76088	-33.4435
OK0P367004 MD	11/29/00	4:31	230.1436	10010.41	83.63815	58761.5	51535.45	49065.38	66.70633	-13.1212

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
OKOP367004 MS	11/29/00	4:39	1659.052	90174.3	1870.943		2922.178	1708.867	108837	1760.505	1886.245	2120.432	2439.564	206517.8
CRI	11/29/00	4:47	18.84287	-17.0185	14.17853		406.3424	10.79571	8.01226	10.93813	105.9109	21.417	50.67624	2.91116
ICSA	11/29/00	4:58	-1.74476	100623.7	-3.74178		0.33137	0.32964	102116.7	-0.34824	-0.64881	-0.11282	-1.96319	40375
ICSAB	11/29/00	5:06	594.2398	98070.75	2023.542		585.9011	202.9679	101426.5	609.5892	598.5372	591.764	573.2067	39993.45
CCV	11/29/00	5:15	596.7037	24866.62	2058.935		594.0348	205.9613	25898.67	626.0497	627.6725	602.4633	583.4166	10130.91
CCV1	11/29/00	5:24	-0.44698	-12.1973	-6.89879		0.07276	0.14167	16.77707	-0.31815	0.08969	1.21666	1.29381	-18.3399
CCB	11/29/00	5:37	0.25018	-6.60535	-0.49501		-0.11925	0.46356	3.6023	0.29349	0.24598	1.59041	1.28263	-8.65719
OKOP367009	11/29/00	5:48	1783.268	121091	2028.407		2939.746	1743.197	100267.2	1792.566	1977.862	2326.245	2747.195	385237.7
OKOP367011	11/29/00	5:56	-2.10754	99323.4	172.6751		1183.851	3.9818	153446.2	11.97921	192.6897	502.5958	1376.305	270271.7
CCV	11/29/00	6:05	596.3864	24672.27	2029.79		594.9379	203.976	25599.19	615.7419	620.2048	603.0945	585.6367	10031.21
CCV1	11/29/00	6:13	-0.05722	-7.18923	-7.30401		0.10171	0.05939	14.2399	-0.23147	-0.26076	2.01668	1.30376	2.9631

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
0K0P367004 MS	11/29/00	4:39	24826.41	44350.22	3470.152	1664.627	3194.941	1880.945	36389.95	1227.923	1677.296		1663.158	
CRI	11/29/00	4:47	373.0406	-5.20123	30.82686	-2.74094	9.83101	83.92924	4.559	123.4542	9.62699		13.25873	
ICSA	11/29/00	4:58	129.7798	105591.7	1.29275	-4.67661	6.24177	-1.86606	1.27367	3.14872	5.41889		-4.20295	
ICSAB	11/29/00	5:06	37125.23	104226.5	397.2996	603.986	9885.751	597.4781	2015.718	1005.946	979.2518		2000.11	
CCV	11/29/00	5:15	36947.91	26021.41	405.4413	3069.85	19310.29	612.6523	2047.332	10156.22	997.9869		2070.109	
CCV1	11/29/00	5:24	5206.18	5.93461	-0.06973	1.77135	11.88924	-0.03755	-1.97418	-1.35203	2.58283		-4.85961	
CCB	11/29/00	5:37	267.4159	5.10185	-0.03652	-4.25997	4.42968	0.1412	-3.30178	-0.81706	1.18704		-5.78132	
0K0P367009	11/29/00	5:48	25383.11	40235.45	32676.24	1723.059	3223.036	2027.017	18015.9	1373.548	1742.157		1732.078	
0K0P367011	11/29/00	5:56	8631.199	60673.64	1945.27	3.16138	1478.593	192.2073	38334.23	14.30171	13.30334		-0.5329	
CCV	11/29/00	6:05	37088.93	25701.97	399.5848	3046.01	19282.45	605.4979	2021.157	10087.17	994.6724		2030.416	
CCV1	11/29/00	6:13	5235.357	3.70679	0.09486	0.41816	17.84086	-1.4539	-1.14572	0.9734	2.81929		-7.93662	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
OK0P367004 MS	11/29/00	4:39	1870.952	10969.77	1805.984	58099	36632.12	36269.05	1738.366	1646.806
CRI	11/29/00	4:47	102.825	45.19393	644.8124	56760.5	7.55263	3.06417	10.77532	9.05347
ICSA	11/29/00	4:58	-1.47725	-3.04539	2.3018	58736	2.66911	0.57673	14.30714	0.98123
ICSAB	11/29/00	5:06	592.1337	612.3868	1000.765	54950.5	2025.53	2010.819	993.5773	972.0997
CCV	11/29/00	5:15	597.8989	639.4362	10.06405	58856.5	2071.858	2035.087	1009.415	992.2811
CCV1	11/29/00	5:24	-1.07062	0.78211	5338.184	56856	5.35309	-5.63259	1.04851	3.34864
CCB	11/29/00	5:37	-0.85344	-0.20474	2.82428	58678.5	0.42968	-5.16497	0.86633	1.34695
OK0P367009	11/29/00	5:48	2050.627	11609.16	1917.44	59305	18211.95	17918.03	1808.434	1709.067
OK0P367011	11/29/00	5:56	201.3028	10482.44	93.00901	55169	38548.57	38227.23	71.43621	-15.7206
CCV	11/29/00	6:05	592.7286	626.7581	4.43671	52071.5	2038.34	2012.579	1001.484	991.2715
CCV1	11/29/00	6:13	-0.82416	0.93428	5084.48	51660	2.27754	-2.85508	6.45006	1.00639

method: 6010B

Slope = Conc(SLR)/1K

Element	Wavelength	High std	Low std	Slope	Y-intercept	Date Standardized
g	328.068	Multiple	Standards	1356.08	-4.26211	11/28/00 10:53:19
l	308.215	Multiple	Standards	177326.	109.573	11/28/00 10:53:19
s	189.042	Multiple	Standards	5417.91	-2.02700	11/28/00 10:53:19
a	493.409	Multiple	Standards	1446.10	-4.58238	11/28/00 10:53:19
e	313.042	Multiple	Standards	1037.88	4.96111	11/28/00 10:53:19
a	317.933	Multiple	Standards	18841.5	-41.5657	11/28/00 10:53:19
d	226.502	Multiple	Standards	692.773	-315806	11/28/00 10:53:19
o	228.616	Multiple	Standards	3831.00	-1.08831	11/28/00 10:53:19
r	267.716	Multiple	Standards	3009.09	-1.19781	11/28/00 10:53:19
u	334.784	Multiple	Standards	2619.65	-3.51863	11/28/00 10:53:19
e	271.441	Multiple	Standards	70330.1	-9.24119	11/28/00 10:53:19
i	766.491	Multiple	Standards	3900.10	-8233.33	11/28/00 11:09:57
ig	879.079	Multiple	Standards	27297.5	-6.34183	11/28/00 10:53:19
in	257.610	Multiple	Standards	2694.14	-343844	11/28/00 10:53:19
lo	202.030	Multiple	Standards	5770.88	-4.85531	11/28/00 10:53:19
la	588.995	Multiple	Standards	1229.63	-30.2928	11/28/00 10:53:19
li	231.604	Multiple	Standards	2413.00	-831598	11/28/00 10:53:19
203/1	220.351	Multiple	Standards	1342.44	2.80019	11/28/00 10:53:19
203/2	220.352	Multiple	Standards	5182.93	-3.99884	11/28/00 10:53:19
3b	206.838	Multiple	Standards	10509.1	-4.64074	11/28/00 10:53:19
960/1	196.021	Multiple	Standards	7292.70	10.2742	11/28/00 10:53:19
960/2	196.022	Multiple	Standards	8741.18	-4.69617	11/28/00 10:53:19
3b	220.353	NONE		1.000000	.000000	*NUT STANDARDIZED
3e	196.026	NONE		1.000000	.000000	*NUT STANDARDIZED
in	189.989	Multiple	Standards	6695.10	-675029	11/28/00 11:09:57
f1	190.864	Multiple	Standards	10148.0	-2.62637	11/28/00 10:53:19
1	292.402	Multiple	Standards	14177.8	-1.23755	11/28/00 10:53:19
In	206.200	Multiple	Standards	6837.90	-1.64263	11/28/00 10:53:19

S127A

089

ethod: 6010B

lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
g	328.068	BLANK	.0000000	.146787	-.046787
		STD 3	375.000	369.847	5.15259
		STD 4	750.000	747.935	4.06476
		STD 5	1500.00	1532.41	-32.4137
CorCoef: 0.99988					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1	348.215	BLANK	.0000000	.816175	-.816175
		STD 3	6250.00	6162.03	87.9473
		STD 4	12500.0	12482.5	17.5409
		STD 5	25000.0	25545.4	-545.447
CorCoef: 0.99990					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
s	189.042	BLANK	.0000000	.118618	-.118618
		STD 3	1250.00	1234.96	15.0399
		STD 4	2500.00	2496.78	33.2299
		STD 5	5000.00	5063.75	-63.7471
CorCoef: 0.99996					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
a	493.409	BLANK	.0000000	.0038785	-.0038785
		STD 3	375.000	370.639	4.36115
		STD 4	750.000	747.454	2.54656
		STD 5	1500.00	1525.94	-25.9374
CorCoef: 0.99993					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.042	BLANK	.0000000	.014010	-.014010
		STD 3	125.000	123.382	1.61828
		STD 4	250.000	249.395	.605347
		STD 5	500.000	503.723	-3.72348
CorCoef: 0.99993					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca	317.933	BLANK	.0000000	.641279	-.641279
		STD 3	6250.00	6178.36	71.4365
		STD 4	12500.0	12425.3	74.6003
		STD 5	25000.0	25449.7	-49.680
CorCoef: 0.99991					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd	226.502	BLANK	.0000000	.019282	-.019282
		STD 3	375.000	372.750	2.27011
		STD 4	750.000	748.633	1.36618
		STD 5	1500.00	1512.47	-12.4709
CorCoef: 0.99998					
lement	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.616	BLANK	.0000000	.044286	-.044286
		STD 3	375.000	369.621	5.37831
		STD 4	750.000	747.415	2.58581
		STD 5	1500.00	1527.47	-27.4696
CorCoef: 0.99992					

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ir	267.716	BLANK	.0000000	.006414	-.006414
	"	STD 3	375.000	374.863	.136902
	"	STD 4	750.000	745.690	4.31000
	"	STD 5	1500.000	1509.17	-9.16760
CorCoef: 0.99998					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Du	324.754	BLANK	.0000000	.0000399	-.0000399
	"	STD 3	375.000	376.045	-1.00493
	"	STD 4	750.000	746.133	3.86652
	"	STD 5	1500.000	1507.104	-7.33650
CorCoef: 0.99998					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	271.441	BLANK	.0000000	.300516	-.300516
	"	STD 3	2500.000	2439.77	10.2312
	"	STD 4	5000.000	5042.13	-42.1366
	"	STD 5	10000.000	10238.4	-203.397
CorCoef: 0.99993					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K	766.491	BLANK	.0000000	-.280036	.280036
	"	STD 6	2500.00	2555.68	-55.6812
	"	STD 7	5000.00	4869.87	130.128
	"	STD 8	10000.00	9997.53	8.46875
CorCoef: 0.99987					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	279.079	BLANK	.0000000	.933485	-.933485
	"	STD 3	6250.00	6141.06	109.937
	"	STD 4	12500.0	12402.0	97.9648
	"	STD 5	25000.0	25012.0	-84.961
CorCoef: 0.99983					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	BLANK	.0000000	.0031520	-.0031520
	"	STD 3	250.000	243.938	4.04187
	"	STD 4	500.000	499.405	.961179
	"	STD 5	1000.000	1018.10	-18.0978
CorCoef: 0.99992					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.430	BLANK	.0000000	.0904900	-.0904900
	"	STD 3	750.000	731.719	11.2808
	"	STD 4	1500.000	1494.96	5.0308
	"	STD 5	3000.00	3005.19	-55.1936
CorCoef: 0.99992					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na	588.995	BLANK	.0000000	.830767	-.830767
	"	STD 3	2500.00	2472.78	27.2229
	"	STD 4	5000.00	4978.72	21.2754
	"	STD 5	10000.00	10131.4	-131.444
CorCoef: 0.99994					

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Li	231.604	Standard BLANK	.0000000	.001712	-.001712
		STD 3	375.000	372.193	2.80524
		STD 4	750.000	747.936	2.06445
		STD 5	1500.00	1513.06	-13.0608
CorCoef: 0.99998					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2003/1	220.351	Standard BLANK	.0000000	-.1200071	.1200071
		STD 3	1250.00	1274.34	-24.8407
		STD 4	2500.00	2473.58	26.4192
		STD 5	5000.00	4993.33	6.67139
CorCoef: 0.99996					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2003/2	220.352	Standard BLANK	.0000000	.156957	-.156957
		STD 3	1250.00	1230.62	19.3796
		STD 4	2500.00	2478.84	21.7634
		STD 5	5000.00	5102.37	-102.369
CorCoef: 0.99987					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	Standard BLANK	.0000000	.290387	-.290387
		STD 3	2500.00	2453.77	44.2305
		STD 4	5000.00	4976.39	23.6004
		STD 5	10000.00	10139.1	-139.116
CorCoef: 0.99993					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/1	196.021	Standard BLANK	.0000000	-.0000000	.0000000
		STD 3	625.000	638.953	-13.9548
		STD 4	1250.00	1236.77	13.2267
		STD 5	2500.00	2469.32	30.6768
CorCoef: 0.99995					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/2	196.022	Standard BLANK	.0000000	.069798	-.069798
		STD 3	625.000	617.126	7.87408
		STD 4	1250.00	1236.42	13.5764
		STD 5	2500.00	2331.18	-31.1753
CorCoef: 0.99985					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	NONE	.0000000	.0000000	.0000000
		NONE	.0000000	.0000000	.0000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se	196.026	NONE	.0000000	.0000000	.0000000
		NONE	.0000000	.0000000	.0000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
n	189.989	BLANK	.0000000	.326348	-.326348
		STD 6	2500.00	2464.23	35.7717
		STD 7	5000.00	4953.55	46.4473
		STD 8	10000.0	10236.0	-235.982

CorCoef: 0.99983

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1	190.864	STANDARD	.0000000	.177780	-.177780
		BLANK			
		STD 3	1250.00	1227.29	22.7101
		STD 4	2500.00	2492.69	7.3174
		STD 5	5000.00	5103.47	-103.370

CorCoef: 0.99990

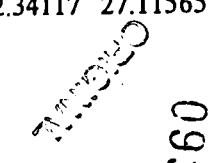
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
-	292.402	BLANK	.0000000	.046201	-.046201
		STD 3	375.000	369.382	5.67736
		STD 4	750.000	747.584	2.41541
		STD 5	1500.00	1528.18	-28.8598

CorCoef: 0.99991

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
n	206.200	BLANK	.0000000	.034187	-.034187
		STD 3	375.000	371.732	3.24771
		STD 4	750.000	747.366	2.63367
		STD 5	1500.00	1526.10	-26.1029

CorCoef: 0.99993

Sample_Name	Date	Time	Silver	Aluminum	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromium	Copper	Iron
BLANK	11/27/00	16:08	-0.00025	-0.0007	-0.0005		0.0001	-0.00407	0.00233	0.00014	-0.00019	0.00042	0.00161	-0.00043
STD 3	11/27/00	16:15	0.26475	0.03393	0.23894		0.24942	0.11812	0.33949	0.57526	0.1008	0.12575	0.1423	0.03629
STD 4	11/27/00	16:21	0.52881	0.06777	0.48534		0.49543	0.24514	0.68918	1.17325	0.20478	0.25101	0.27498	0.07376
STD 5	11/27/00	16:28	1.05875	0.13642	0.95466		0.98733	0.48458	1.34793	2.27742	0.40621	0.50528	0.56155	0.14393
STD 6	11/27/00	16:35												
STD 7	11/27/00	16:40												
STD 8	11/27/00	16:45												
STD 5	11/27/00	16:50	1491.924	24847.14	4995.738		1468.617	500.3953	25105.75	1496.676	1500.913	1483.701	1465.378	9887.475
STD 8	11/27/00	16:57	-0.70592	8.42977	1.82009		0.18928	0.21836	32.82061	-0.22514	-0.34745	-0.20293	0.30799	21.81542
ICV	11/27/00	17:12	2043.374	2015.783	1993.849		2053.38	1958.533	2019.166	1978.69	1997.07	1990.453	2021.304	2021.585
ICV1	11/27/00	17:19	0.52422	2.99415	5.12014		0.76823	0.33814	38.8496	0.21292	1.1182	6.93679	1.42374	91.71155
ICB	11/27/00	17:26	0.57421	-0.59435	-1.53571		0.54661	0.03179	5.89379	0.25599	0.89536	-0.33717	-0.00405	61.46386
CCV	11/27/00	17:33	626.9544	25628.58	2039.275		623.0768	202.9045	25231.5	597.2871	616.6248	619.4728	631.8732	10062.24
CCV1	11/27/00	17:40	-3.89137	-16.3499	-4.93492		-0.48147	-0.11353	12.39168	-0.95092	-2.92097	-2.6742	-1.84052	-43.6539
CCB	11/27/00	17:49	0.11109	-5.70891	2.45546		0.13157	0.0006	8.08698	-0.05243	0.34386	-0.36548	0.0016	25.68348
CRI	11/27/00	17:55	21.12283	-2.14154	21.4899		415.7581	10.0084	7.20082	10.54641	104.2427	20.68311	52.0441	35.32861
ICSA	11/27/00	18:02	0.86665	104621.9	0.29516		0.59211	-0.05675	101640	-0.39004	1.52411	0.81186	-1.77294	40657.9
ICSAB	11/27/00	18:09	640.3163	105269	2065.068		634.958	206.5791	103182.1	604.5998	611.7838	618.0469	628.8895	40692.7
PB M6 11/21 L	11/27/00	18:16	94.58156	13213.67	251.5546		249.2387	4.77077	38377.64	12.01896	9.21853	170.0477	387.851	65369.37
LCS	11/27/00	18:25	175684.4	206185.4	171023.5		180648.9	171446.4	212300.4	174397.5	175308.6	173797.6	176856.4	212817.3
OKOP533001	11/27/00	18:33	-88.9139	7247345	5752.645		50383.48	358.7419	204263.5	93.392	3981.878	7324.593	5272.349	12289095
OKOP533002	11/27/00	18:41	390.2347	9158688	6578.618		57823.7	396.6105	224969.8	97.23568	4781.834	9469.785	5463.306	15324326
OKOP533003 QC	11/27/00	18:50	106.1931	8605004	7327.723		32465.49	284.3677	122924	86.1462	6913.796	8178.791	6179.555	14195710
OKOP533003 L	11/27/00	18:58	282.1183	9422818	8768.29		34633.05	364.5839	137455.7	-10.7132	7982.311	9010.59	6785.017	15489636
OKOP533003 AS	11/27/00	19:07	35815.46	7303219	200580.6		225290.5	198056.1	305608	196966	205545.1	205658.3	204182.8	11927223
OKOP533004 MS	11/27/00	19:15	168084.8	10004871	159106.6		205112.3	168117.5	314641	164977.2	173597	176728.8	173267.7	14382954
OKOP533005 MD	11/27/00	19:23	45.75275	8826670	7257.612		35287.51	305.2711	186616.8	95.4256	5884.908	8163.83	7263.113	15513416
OKOP533006	11/27/00	19:32	27.79795	9004246	7041.057		34105.33	329.0711	171471.8	79.64146	4794.716	8660.029	7268.357	13569367
CCV	11/27/00	19:40	617.3342	25341.52	2021.542		618.1586	205.0633	25765.87	613.4216	625.176	611.7432	600.3303	10145.27
CCV1	11/27/00	19:49	0.36475	-7.03998	1.85086		0.32867	0.03084	9.97563	0.05604	0.64736	-0.29278	0.55148	20.26361
CCB	11/27/00	19:57	-0.24692	-3.30419	-0.63331		0.05921	-0.07585	3.58488	0.146	0.70765	-0.12192	0.72471	14.972
OKOP533007	11/27/00	20:05	40.84193	5902297	5217.387		52258.82	233.5549	3520555	233.9226	4725.159	6549.706	9477.82	10357508
OKOP533008	11/27/00	20:14	-20.9585	8446418	7310.867		54675.04	308.146	1485154	167.7868	5501.941	8642.762	7866.056	13591292
OKOP533009	11/27/00	20:22	64.47813	6403822	20692.41		62779.14	306.4911	2012228	178.6091	6262.967	7061.392	8224.049	13098285
OKOP533010	11/27/00	20:31	-10.3984	4928692	5940.237		45579.34	285.8901	1107802	175.3857	3793.492	5938.457	7471.882	12124308
OKOP533011	11/27/00	20:39	-45.1043	4082871	8345.188		43837.55	220.4924	29780428	126.5053	4658.877	5123.415	15844.95	11782892
OKOP533012	11/27/00	20:47	-23.0677	6367749	9294.911		55050.91	287.4897	3500404	153.8818	5530.721	6969.855	9964.817	14385354
OKOP533013	11/27/00	20:56	-0.46766	4100231	7435.906		47458.92	231.9413	10409949	65.06436	4300.787	5174.631	13121.03	11195700
CRI	11/27/00	21:04	19.76809	-14.2822	19.94182		419.4161	10.45074	13.2585	10.42253	104.5668	19.92809	52.34117	27.11565



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Sample_Name	Date	Time	Potassium	agnesi	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
BLANK	11/27/00	16:08	0.48387	-0.00009	0.00007	0.00006	0.06639	-0.00012		0.00013			-0.00062	
STD 3	11/27/00	16:15		0.2349	0.09267	0.13246	2.12831	0.16267		0.23794			0.12749	
STD 4	11/27/00	16:21		0.47909	0.18708	0.2688	4.13315	0.33085		0.47859			0.25966	
STD 5	11/27/00	16:28		0.95596	0.36649	0.52863	8.10332	0.64397		0.94838			0.51053	
STD 6	11/27/00	16:35	1.13021											
STD 7	11/27/00	16:40	1.77388											
STD 8	11/27/00	16:45	2.97738										4966.848	
STD 5	11/27/00	16:50	82685.32	25344.36	990.1368	2982.689	9849.463	1489.992	5018.466	9919.363	2487.325		7.37682	
STD 8	11/27/00	16:57	9795.545	4.00283	-0.13575	1.96407	35082.78	-1.21313	2.65668	-1.04	-0.68635		2007.13	
ICV	11/27/00	17:12	19292.41	2018.402	1998.198	2011.65	2043.683	1997.4	1980.023	2019.174	1983.057		4.20738	
ICV1	11/27/00	17:19	79.86087	3.76057	1.46879	4.21274	10178.67	4.88388	3.05704	3.45879	2.58575		4.37727	
ICB	11/27/00	17:26	143.8789	7.6557	0.17893	1.57764	-1.14391	0.80052	3.38905	2.90551	3.69087		2035.206	
CCV	11/27/00	17:33	38000.7	25471.07	405.9653	3046.8	19350.58	600.8916	2060.089	10315.35	1039.9		1.09681	
CCVI	11/27/00	17:40	5127.78	-22.3821	-0.4386	1.63487	2.9925	-3.04995	3.578	-9.37239	1.27022		-0.46341	
CCB	11/27/00	17:49	66.90615	4.20398	-0.05231	0.45022	-2.85528	0.27475	2.8175	-1.24144	1.13002		20.06946	
CRI	11/27/00	17:55	243.0537	6.56219	31.18125	0.48761	1.76382	85.17771	8.81481	128.239	12.76766		0.66105	
ICSA	11/27/00	18:02	82.55831	105388.5	1.53636	-0.73309	8.2471	1.91849	7.40215	1.65594	-1.75025		2045.566	
ICSAB	11/27/00	18:09	39064.29	107542.3	411.6808	625.3842	10371.14	606.2601	2043.273	1058.381	1033.032		-130.76	
PB M6 11/21 L	11/27/00	18:16	19616.11	11108.9	211.7806	106.839	20559.52	257.6326	340.5553	195.9023	646.5731		171807.3	
LCS	11/27/00	18:25	1646608	187714	173496.9	175039.1	198196.2	174233.7	174605.9	172577.9	160447.5		567.5564	
OKOP533001	11/27/00	18:33	281918.8	944849.5	920459.6	777.163	32410.2	6607.648	9061.764	243.4874	103.8875		230.3996	
OKOP533002	11/27/00	18:41	443485.9	1245588	921757.5	699.6942	31329.01	8077.412	11833.34	759.4716	-19.5189		176.299	
OKOP533003 QC	11/27/00	18:50	351414.8	1049916	532905.1	684.0152	33617.58	7012.211	13132.4	397.9379	-330.133		-475.388	
OKOP533003 L	11/27/00	18:58	613423.4	1139330	580254.8	1017.604	38262.89	8091.271	14515.19	230.0778	713.5994		196295.4	
OKOP533003 AS	11/27/00	19:07	2131128	1064533	634140.4	202262.7	242490	204238.8	201188.6	195987.9	176651.4		162526.2	
OKOP533004 MS	11/27/00	19:15	1851239	1324380	696164.9	164803.9	196357	174694.3	180826.8	102818	152633.4		891.4994	
OKOP533005 MD	11/27/00	19:23	405864.8	1133667	443546.3	729.995	33969.49	7659.68	12567.65	174.787	279.5233		835.2261	
OKOP533006	11/27/00	19:32	397624.2	1145262	435808.6	763.0517	30287.85	7826.145	15955.95	37.03607	214.2846		2045.892	
CCV	11/27/00	19:40	38011.67	25827.45	406.6497	3092.783	19386.72	610.0088	2058.88	10280.52	1021.922		1.86473	
CCV1	11/27/00	19:49	5396.657	6.57667	-0.02748	2.28097	6.68741	0.17736	1.5479	2.63623	2.30302		-0.57711	
CCB	11/27/00	19:57	507.8121	6.51696	-0.05203	0.15352	2.09048	0.25476	3.119	3.11668	-0.26945		-177.484	
OKOP533007	11/27/00	20:05	491644	1438819	699325.8	475.1754	42346.4	7728.545	13396.52	118.8851	691.9774		569.257	
OKOP533008	11/27/00	20:14	500417.1	1340208	557530.3	723.1458	34884.54	8264.722	18251.97	695.1096	-425.517		567.8131	
OKOP533009	11/27/00	20:22	369809.3	2253506	616579.4	211.2919	32910.41	10865.44	12652.68	376.5801	-318.197		481.2769	
OKOP533010	11/27/00	20:31	253880	1027819	291914.1	382.4719	33736.4	7252.625	9907.025	323.2401	-5.86001		-196.474	
OKOP533011	11/27/00	20:39	368501.6	6484660	379994.8	323.6135	53135.48	9175.714	12343.48	-54.4144	-121.392		-202.151	
OKOP533012	11/27/00	20:47	337748.2	2105754	485091.8	695.9891	37055.57	9160.036	14528.81	333.3272	-18.1066		170.5066	
OKOP533013	11/27/00	20:56	344959.7	2478934	391501.4	414.65	40771.16	9517.871	10132.53	243.138	-6.84556		19.64257	
CRI	11/27/00	21:04	542.0502	3.62893	30.3983	0.03352	5.28306	83.43826	8.4238	121.7767	12.0977			

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y	2203/1	2203/2	1960/1	1960/2
BLANK	11/27/00	16:08	-0.00003	0.00011	0.00042	75772.5	-0.00027	-0.0004	-0.00065	0.00009
STD 3	11/27/00	16:15	0.02621	0.04644		76934	1.01243	0.24659	0.08573	0.07216
STD 4	11/27/00	16:21	0.0528	0.09565		75928	2.0685	0.51299	0.17253	0.14743
STD 5	11/27/00	16:28	0.10445	0.18501		76203	4.13338	1.001	0.35049	0.29021
STD 6	11/27/00	16:35			0.37692	76204.5				
STD 7	11/27/00	16:40			0.77388	74837.5				
STD 8	11/27/00	16:45			1.52396	73820.5				
STD 5	11/27/00	16:50	1488.583	1518.754	7.33704	77551	4960.945	5047.187	2457.555	2502.188
STD 8	11/27/00	16:57	0.45844	1.86874	9934.844	78268.5	0.15352	3.90619	-3.49196	0.7142
ICV	11/27/00	17:12	2007.018	1959.667	-0.61145	72797	1980.792	1979.639	1996.629	1976.281
ICV1	11/27/00	17:19	2.12582	3.68593	2060.488	72733.5	11.46916	-1.14291	3.39955	2.17929
ICB	11/27/00	17:26	2.16123	1.37154	-1.70502	70649	-3.42255	6.78953	-5.19127	8.12512
CCV	11/27/00	17:33	606.8889	593.0763	6.31453	71488.5	2058.287	2060.989	1045.95	1036.88
CCV1	11/27/00	17:40	-3.25264	-0.03483	5049.899	72091	8.68106	1.03009	4.07734	-0.13139
CCB	11/27/00	17:49	0.38929	0.99175	-2.44672	72683.5	5.34857	1.55365	2.3235	0.53401
CRI	11/27/00	17:55	104.8404	42.18505	628.438	69280	-6.31009	16.36571	-0.51304	19.39788
ICSA	11/27/00	18:02	-0.31234	-1.35403	-2.45231	70740.5	1.20591	10.49538	2.91338	-4.07875
ICSAB	11/27/00	18:09	623.1033	598.4558	994.4475	68107.5	2047.346	2041.24	1033.531	1032.782
PB M6 11/21 L	11/27/00	18:16	161.7151	1620.061	2632.703	70924.5	511.2855	255.2974	-590.032	1263.932
LCS	11/27/00	18:25	174053	174042.1	2894.436	73894	173418.5	175198.7	159577.8	160881.7
OK0P533001	11/27/00	18:33	12507.38	35398.35	3186.068	71596.5	9210.742	8987.36	561.928	-124.806
OK0P533002	11/27/00	18:41	17133.63	42642.63	3238.973	64908	12047.43	11726.44	619.5498	-338.592
OK0P533003 QC	11/27/00	18:50	15289.03	36799.77	3295.649	65255.5	13473.65	12962	596.1865	-792.617
OK0P533003 L	11/27/00	18:58	15374.6	41027.29	4389.547	64168	20962.84	11296.08	3105.815	-480.809
OK0P533003 AS	11/27/00	19:07	211712.2	228095.6	196708.3	64889	207675.7	197949.8	183752.5	173106.2
OK0P533004 MS	11/27/00	19:15	184279	206894.5	2966.745	63494	176755.9	182859.1	149516	154189.8
OK0P533005 MD	11/27/00	19:23	15633.92	38648.11	3468.49	65220	12181.41	12760.45	513.3365	162.7723
OK0P533006	11/27/00	19:32	15414.96	37993.84	3106.244	65523.5	15460.18	16203.43	144.9175	248.8967
CCV	11/27/00	19:40	608.1449	615.6649	8.31167	63700	2027.761	2074.415	1011.871	1026.941
CCV1	11/27/00	19:49	0.68193	2.9575	5024.647	62604.5	-2.3	3.46872	0.51563	3.19518
CCB	11/27/00	19:57	0.342	1.44046	-2.60455	63668.5	-0.19894	4.77525	-0.18997	-0.30932
OK0P533007	11/27/00	20:05	10311.84	40978.95	3199.651	64320	13486.72	13351.46	463.138	806.2068
OK0P533008	11/27/00	20:14	14923.46	42662.47	3388.621	64491.5	17934.3	18410.54	-451.602	-412.515
OK0P533009	11/27/00	20:22	9818.932	35320.34	3277.257	65509.5	12293.09	12832.18	-236.373	-359.067
OK0P533010	11/27/00	20:31	9946.721	27057.34	3109.028	65679	10026.02	9847.596	206.0984	-111.7
OK0P533011	11/27/00	20:39	6911.588	39727.44	2790.682	64186.5	12277.54	12376.38	447.9466	-405.653
OK0P533012	11/27/00	20:47	11689.83	34494.5	3043.297	60590.5	15428.02	14079.86	409.9717	-231.844
OK0P533013	11/27/00	20:56	6829.467	37759.14	2792.357	66086.5	9890.553	10253.32	-214.555	96.83547
CRI	11/27/00	21:04	103.5753	43.06075	611.0804	62668	6.59438	9.3369	11.07793	12.60662



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Sample_Name	Date	Time	Silver	Aluminum	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromium	Copper	Iron
ICSA	11/27/00	21:13	-0.65275	101594.3	-2.01226		0.65296	0.0971	103697	-0.25122	0.47622	-0.7553	-2.37035	40372.18
ICSA B	11/27/00	21:21	617.9812	100061.3	2009.246		610.5206	203.7009	101991.5	602.2958	601.7592	599.5732	597.5856	39714.44
CCV	11/27/00	21:29	617.4475	25229.27	2040.433		618.725	206.6761	26006.05	621.3797	632.078	613.8679	605.3984	10119.99
CCV1	11/27/00	21:38	-2.38276	-15.6825	-0.278		0.26079	0.04093	11.74927	-0.47307	-0.08398	-1.62725	-0.64605	32.02759
CCB	11/27/00	21:46	-0.26781	-13.242	-2.32635		0.0795	-0.00925	9.28297	0.01935	0.71341	-0.43173	0.67737	13.91866
OKOP281002	11/27/00	21:55	455.9661	1549.959	-354.83		51.589	70.177	236389.1	3.9498	203.7896	-53.5433	80.72004	4352.94
OKOP281003	11/27/00	22:03	-20.5506	-403.704	240.9565		35.62509	41.56172	134409.4	-8.4314	124.1448	-71.0707	5.95605	1049.723
OKOP281004	11/27/00	22:11	-29.8981	2614.211	-171.445		19.26302	48.34996	188026.9	-36.2964	223.2084	5.45228	109.1318	4393.72
PB M3 11/20 I	11/27/00	22:24	0.70514	-16.1479	1.48936		0.14794	0.0425	20.00281	-0.01861	0.73748	-0.32145	1.05861	40.91471
LCS	11/27/00	22:32	1909.953	1809.149	1884.616		1933.549	1903.353	1998.505	1963.037	1965.304	1924.582	1903.25	1945.054
LCS NA	11/27/00	22:40	-0.26382	-15.7336	-2.91678		0.05275	0.12976	26.41841	0.03487	0.58123	0.68019	2.16266	20.16091
OKOP504003	11/27/00	22:49	7.38923	6857.768	86.84919		2510.386	2.17582	979988.1	3.84088	144.018	39.35366	6.67576	119073.9
CRI	11/27/00	23:01	20.08158	-18.6719	20.49687		420.9922	10.38258	27.84708	10.56342	105.5885	19.94512	52.64264	27.86589
ICSA	11/27/00	23:09	0.47968	100237.8	5.99299		0.77056	0.21996	103131.5	-0.01333	1.11713	-0.1674	-0.86161	39959.86
ICSA B	11/27/00	23:18	619.0454	99438.05	2006.628		614.2676	205.3736	102378	610.5745	610.9292	624.7156	622.9127	39814.8
CCV	11/27/00	23:26	595.1488	23767.33	1974.657		595.403	201.8961	25241.63	606.7864	622.4537	590.809	577.5399	9766.779
CCV1	11/27/00	23:34	-0.64897	-28.6375	0.3414		0.08541	0.05524	16.36196	-0.10979	0.57149	-0.56072	0.51009	-11.8258
CCB	11/27/00	23:43	0.39399	-18.0845	0.07093		0.04932	0.16626	10.51057	-0.18851	0.36889	-0.57316	1.17277	8.30192
PB M1 11/8 CC	11/28/00	0:02	-0.43929	-9.85861	-0.52468		0.32681	0.14767	30.13518	0.08248	0.58099	-0.25297	0.56135	54.36314
LCS	11/28/00	0:11	2096.425	1987.334	2071.131		2115.125	2055.471	2134.179	2099.763	2106.531	2051.127	2055.931	2094.34
LCS NA	11/28/00	0:19	0.60096	-16.739	-1.77958		0.21479	0.28956	56.57335	-0.07228	0.94483	0.21479	0.86532	34.27673
OKOP206001	11/28/00	0:27	0.68181	382.3309	0.37796		55.28141	0.13025	53345.88	0.12525	15.21265	2.42254	67.64305	3073.366
OKOP206003	11/28/00	0:36	1.08822	287.9652	1.63794		49.64878	0.11115	51162.87	0.3066	12.89308	3.06225	47.69982	2466.181
OKOP206004	11/28/00	0:44	-0.56318	251.3363	-0.78256		43.45907	0.12342	40910.95	-0.09874	-0.36705	0.36732	4.61014	157.8986
PB M1 11/15 XX	11/28/00	0:56	0.57432	-3.67775	-0.40974		0.09156	0.2458	20.00928	0.06613	0.67747	0.37344	0.79053	10.94704
LCS	11/28/00	1:05	2053.419	2012.535	2030.112		2072.223	2034.034	2098.354	2077.29	2083.469	2049.415	2045.455	2094.975
OKOP408001	11/28/00	1:13	-1.18566	717.3091	1.36119		43.82971	0.61042	13247.15	0.09474	1.16482	0.95066	5.34035	2628.967
OKOP408002	11/28/00	1:22	0.21056	3.93921	-0.16297		37.78559	0.30999	12534.72	0.28587	1.25909	2.32697	5.4358	260.9323
CCV	11/28/00	1:46	611.8563	24445.79	1999.028		611.8159	205.1009	25763.95	615.3179	628.8421	611.2947	599.9507	9961.732
CCV1	11/28/00	1:55	-0.2691	-20.0941	0.07132		0.25444	0.30406	13.26757	0.01373	0.62006	-0.65933	0.6506	28.23378
CCB	11/28/00	2:03	0.13078	-23.0579	-3.45378		0.13026	0.20019	5.43378	-0.12419	-0.0708	-1.78945	-0.71211	21.82801
OKOP408003	11/28/00	2:12	-0.62998	2388.951	24.46534		116.2616	0.82688	11693.93	0.29782	6.21913	106.9178	69.3603	10023.12
OKOP408004 QC	11/28/00	2:20	-0.73908	19.59866	21.37044		32.07354	-0.0025	9667.533	-0.16067	-0.04398	97.78099	27.60718	190.4736
OKOP408004 L	11/28/00	2:29	4.76669	-33.9694	34.80934		30.55201	1.96196	9516.16	0.29925	4.61838	93.99459	42.33124	155.405
OKOP408004 MD	11/28/00	2:37	-0.80368	19.75277	23.84588		31.26581	-0.10262	9590.354	0.03113	0.21808	95.35015	25.8894	182.1321
OKOP408004 MS	11/28/00	2:45	2086.124	2039.828	2170.815		2138.191	2171.848	11712.64	2190.535	2211.974	2235.651	2164.787	2318.354
OKOP408004 MSD	11/28/00	2:54	2035.572	1974.309	2041.421		2086.573	2040.452	11124.48	2048.905	2071.931	2106.719	2054.635	2165.703
PB M3 11/16 B	11/28/00	3:10	-0.71498	-18.2383	-0.18347		1.33952	0.26999	10.48203	-0.0996	-0.25756	-0.69624	0.4123	26.49747
LCS	11/28/00	3:18	1907.212	1819.83	1885.087		1946.958	1901.623	1967.793	1967.499	1955.743	1891.362	1877.243	1934.232

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Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
ICSA	11/27/00	21:13	504.6208	107081.2	1.36734	-0.24676	15.81884	0.86376	8.31821	-3.12857	2.51629		4.13855	
ICSAB	11/27/00	21:21	38154.62	105151.7	397.5314	620.4588	9993.691	591.1044	2013.14	1023.159	988.9917		1998.276	
CCV	11/27/00	21:29	38075.87	26214.11	405.9158	3124.814	19347.82	610.4147	2063.182	10335.81	1019.338		2044.34	
CCV1	11/27/00	21:38	5571.236	-6.2349	-0.19144	2.64703	10.67638	-1.0615	1.29758	-3.22592	0.3164		1.33458	
CCB	11/27/00	21:46	620.4151	7.41225	-0.07043	1.06376	8.19316	1.11225	2.70095	-0.67757	-0.53537		-0.87419	
OKOP281002	11/27/00	21:55	121151	10082.83	87.24754	792.0034	5314421	-36.3325	160.8839	127.7068	82.65168		259.1456	
OKOP281003	11/27/00	22:03	130924.8	13529.49	133.9756	411.9968	2961730	-241.992	295.0479	-210.792	135.5116		-632.217	
OKOP281004	11/27/00	22:11	131581.8	12729.08	53.9055	477.6443	4299002	101.8255	249.3737	-242.615	1099.764		736.6624	
PB M3 11/20 I	11/27/00	22:24	539.0659	11.93154	0.07942	0.60733	9.42986	-0.25076	-0.38409	4.65953	2.67452		1.44602	
LCS	11/27/00	22:32	18317.08	2013.518	1893.299	1994.856	1898.225	1926.028	1937.864	1917.437	1777.627		1912.58	
LCS NA	11/27/00	22:40	592.5323	8.06232	0.1262	1.49323	20340.53	0.04589	0.44743	1.22007	4.20713		-4.02895	
OKOP504003	11/27/00	22:49	397934.5	411156.8	60712.84	14.85235	15976.87	264.7326	16.80265	5.03916	17.15291		-53.2377	
CRI	11/27/00	23:01	743.0196	11.38822	31.38065	0.66453	9.64979	83.50785	11.02791	126.5364	16.60855		19.9229	
ICSA	11/27/00	23:09	755.198	107903.3	1.70305	-0.03935	20.31885	0.94297	5.83501	3.22225	2.4038		1.68513	
ICSAB	11/27/00	23:18	38877.18	106646.3	396.5493	635.2351	10075.53	597.0855	2004.338	1039.289	986.5624		2013.627	
CCV	11/27/00	23:26	37220.64	25751.82	387.7158	3064.222	18821.25	593.0077	1996.985	10012.89	976.7959		1986.415	
CCV1	11/27/00	23:34	6059.361	8.18337	-0.14202	2.89564	22.56435	-0.53565	1.31912	-2.34304	-0.15356		2.99187	
CCB	11/27/00	23:43	689.3743	9.63937	0.00487	0.52152	4.82823	0.02821	1.03931	0.09408	1.68502		-2.68275	
PB M1 11/8 CC	11/28/00	0:02	673.3265	7.17275	0.27396	-0.2423	10.34376	-0.85592	1.13952	1.90997	3.34079		2.21222	
LCS	11/28/00	0:11	20081.23	2150.304	2037.993	2140.11	2093.729	2068.997	2075.753	2100.882	2022.834		2069.394	
LCS NA	11/28/00	0:19	553.258	5.09243	0.23297	2.85229	19888.83	0.59253	3.119	4.03811	3.52196		2.73541	
OKOP206001	11/28/00	0:27	12749.94	9957.526	140.5	459.1262	185475.4	5.81606	17.62916	2.87773	6.05186		-0.70131	
OKOP206003	11/28/00	0:36	12648.09	9496.86	104.1387	754.1781	146115.1	4.61862	12.00931	1.62709	-0.42198		1.88821	
OKOP206004	11/28/00	0:44	2678.031	8111.213	5.48712	1.16487	22296.93	1.81822	2.633	-1.96904	6.45396		0.21403	
PB M1 11/15 XX	11/28/00	0:56	455.5141	8.08421	0.24195	0.15895	85.0268	2.49583	0.76115	2.23949	-0.75266		-3.05822	
LCS	11/28/00	1:05	19756.95	2113.026	2025.91	2104.989	2206.117	2052.773	2060.546	2061.643	1987.604		2046.799	
OKOP408001	11/28/00	1:13	12648.85	3558.874	210.2086	2.32602	12001.01	3.17917	2.38666	0.65692	1.61415		1.07931	
OKOP408002	11/28/00	1:22	11286.62	3285.722	162.6225	1.03846	11656.09	2.57491	1.47275	-0.33288	1.9877		-8.81869	
CCV	11/28/00	1:46	38135.8	26107.39	396.4647	3117.91	19244.22	597.3313	2028.047	10196.59	998.7506		2005.164	
CCV1	11/28/00	1:55	5525.578	4.87885	-0.02895	3.33966	17.65431	-0.79876	1.23402	0.45884	1.6329		1.9194	
CCB	11/28/00	2:03	415.9698	0.82414	-0.16052	-0.12273	4.81359	0.02665	2.75212	-1.16117	2.47689		4.89196	
OKOP408003	11/28/00	2:12	10313.86	2762.794	1681.661	0.96276	4836.791	7.708	8.62879	-0.007	3.824		-4.65836	
OKOP408004 QC	11/28/00	2:20	9623.962	2033.441	245.7892	1.55191	4723.811	2.14551	2.72093	1.66763	-3.10351		0.29873	
OKOP408004 L	11/28/00	2:29	11424.41	2028.906	239.5522	4.70866	4767.302	4.38132	9.62432	-8.89127	5.83665		6.93901	
OKOP408004 MD	11/28/00	2:37	9326.086	1999.035	239.4005	0.81002	4668.927	1.31893	3.54446	-0.64184	7.75431		-2.18156	
OKOP408004 MS	11/28/00	2:45	28393.71	4291.431	2372.343	2206.724	6746.098	2174.516	2113.834	2178.545	2010.564		2135.419	
OKOP408004 MSD	11/28/00	2:54	27618.03	4061.189	2227.356	2070.913	6579.302	2035.26	2035.446	2049.198	1966.315		2015.904	
PB M3 11/16 B	11/28/00	3:10	405.0099	6.5847	-0.05658	0.86484	28.96767	0.00034	3.97962	-2.43071	1.84539		-5.16327	
LCS	11/28/00	3:18	18435.67	2001.748	1862.621	1995.782	1954.593	1928.49	1938.107	1905.63	1762.683		1910.469	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
ICSA	11/27/00	21:13	-0.06157	-1.05368	-2.33918	63746	6.13582	9.40749	2.55267	2.49792
ICSAB	11/27/00	21:21	603.2955	599.5492	976.5889	63710	2011.4	2014.008	988.0305	989.4713
CCV	11/27/00	21:29	605.6483	625.1794	6.96096	65258.5	2061.907	2063.819	1016.539	1020.736
CCV1	11/27/00	21:38	1.27822	2.94596	4954.959	58700.5	-2.57697	3.2317	0.32481	0.312
CCB	11/27/00	21:46	0.57696	2.65151	-2.40113	62367.5	0.29825	3.90027	-3.47164	0.93037
OKOP281002	11/27/00	21:55	134.4837	810.511	-201.523	65730.5	115.0439	183.724	-292.521	269.9201
OKOP281003	11/27/00	22:03	46.12651	426.8109	-129.336	63605	96.90093	393.9257	506.6406	-49.8123
OKOP218004	11/27/00	22:11	0.53616	417.5509	-385.046	63245	-71.8646	409.7046	1277.334	1011.073
PB M3 11/20 I	11/27/00	22:24	1.03106	1.27959	-1.311	63050	-2.42873	0.63645	-12.6672	10.3337
LCS	11/27/00	22:32	1911.645	1984.216	1884.227	61638	1941.296	1936.15	1791.947	1770.478
LCS NA	11/27/00	22:40	-0.00525	1.11672	-2.15085	61986	5.74086	-2.19555	-0.56843	6.59114
OKOP504003	11/27/00	22:49	15.14985	564.8565	37.1459	65550	18.25517	16.07724	42.54589	4.47527
CRI	11/27/00	23:01	104.2261	43.63381	614.9948	59522	9.32694	11.87688	13.65095	18.08493
ICSA	11/27/00	23:09	-0.13231	-1.27548	1.12051	58237	9.79375	3.85831	8.71347	-0.7465
ICSAB	11/27/00	23:18	603.7505	609.3922	982.8046	59373	2122.945	1945.124	1052.025	953.8801
CCV	11/27/00	23:26	579.364	620.7705	10.31434	59269.5	1964.215	2013.345	954.3535	988.0001
CCV1	11/27/00	23:34	-1.09286	3.2851	5050.042	51066.5	4.00237	-0.02077	2.15687	-1.30728
CCB	11/27/00	23:43	0.33321	2.40495	-2.0015	59738	0.94058	1.08835	2.38623	1.33474
PB M1 11/8 CC	11/28/00	0:02	1.40899	1.98927	-5.6145	59978	-4.11466	3.76242	-2.97578	6.49414
LCS	11/28/00	0:11	2051.806	2106.804	2056.665	64015.5	2073.382	2076.937	2017.142	2025.676
LCS NA	11/28/00	0:19	0.58681	1.76294	-4.42195	62196	2.51806	3.41877	0.77391	4.89373
OKOP206001	11/28/00	0:27	-0.19911	121.8543	-0.01406	61001.5	11.95082	20.46383	0.45923	8.84378
OKOP206003	11/28/00	0:36	-3.15625	84.8304	-0.80938	62193.5	17.26193	9.3867	2.53961	-1.90076
OKOP206004	11/28/00	0:44	2.2714	10.8891	-3.78007	64329	-4.71368	6.3006	2.51873	8.41844
PB M1 11/15 XX	11/28/00	0:56	0.12705	4.73549	0.23491	66958	5.60938	-1.65954	-5.48823	1.61139
LCS	11/28/00	1:05	2037.741	2094.855	2026.758	64415.5	2053.227	2064.2	1993.567	1984.627
OKOP408001	11/28/00	1:13	2.71498	98.93201	-0.05937	64528	-0.27315	3.71434	1.068	1.88663
OKOP408002	11/28/00	1:22	-0.3501	60.63404	-1.6228	63711	9.23911	-2.40483	3.27839	1.34313
CCV	11/28/00	1:46	591.5414	624.6706	4.69148	53447	2063.565	2010.314	1015.315	990.4804
CCV1	11/28/00	1:55	0.80401	3.685	5082.169	63220	-3.75036	3.72224	-6.78702	5.83637
CCB	11/28/00	2:03	0.99216	2.25854	-1.61409	66191	0.79521	3.72888	-4.50392	5.96188
OKOP408003	11/28/00	2:12	7.43979	204.1736	-0.79554	65232.5	4.50016	10.68978	0.20908	5.62857
OKOP408004 QC	11/28/00	2:20	2.77156	65.04206	-1.56785	57056	-8.56095	8.35315	-4.30575	-2.50351
OKOP408004 L	11/28/00	2:29	1.14401	68.91829	0.58851	68089.5	20.02218	4.43208	8.77919	4.36671
OKOP408004 MD	11/28/00	2:37	3.01696	53.92376	-0.33077	60008	-1.62367	6.1244	5.58434	8.83746
OKOP408004 MS	11/28/00	2:45	2151.281	2276.154	2053.054	59524	2167.544	2087.018	2087.669	1972.068
OKOP408004 MSD	11/28/00	2:54	2021.834	2124.292	1994.497	62805	2031.794	2037.27	1967.389	1965.779
PB M3 11/16 B	11/28/00	3:10	-0.09632	1.80919	-2.69049	65280.5	8.26524	1.83979	-2.37087	3.95018
LCS	11/28/00	3:18	1891.412	1980.69	1569.004	66549.5	1927.754	1943.275	1755.29	1766.374

Sample_Name	Date	Time	Silver	Aluminum	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromium	Copper	Iron
OKOP454001	11/28/00	3:26	-0.14326	941.7188	1.65582		167.9585	0.19578	242241.1	0.20319	4.01323	2.86007	6.96079	1448.27
OKOP454002	11/28/00	3:35	0.70732	-2.03168	-2.66587		1.43314	0.44955	358.9829	0.04343	1.18683	0.8437	5.782	26.51017
CRI	11/28/00	3:43	20.61032	-16.7757	21.72237		408.78	10.27554	13.59531	10.61908	103.0909	19.871	51.42224	32.87479
ICSA	11/28/00	3:52	-0.50207	95776.52	4.73093		0.70346	0.44667	97981.8	-0.03007	0.24006	-1.27461	-1.77378	37873.89
ICSAB	11/28/00	4:00	624.3602	100710.2	2045.962		628.8768	205.9961	101787	610.3152	612.5596	600.4095	615.6721	39656.09
CCV	11/28/00	4:09	625.3002	25210.84	2077.601		630.5186	211.0403	26367.28	634.6191	651.6459	616.4425	622.1785	10159.52
CCV1	11/28/00	4:17	-0.4063	-16.7892	-0.10191		0.10465	0.4993	17.54813	-0.15129	0.32689	-0.14072	1.20158	6.78889
CCB	11/28/00	4:25	0.23255	-26.1802	0.25705		0.14035	0.53174	8.78259	0.00163	0.6844	-0.23867	0.53938	30.26687
OKOP454003	11/28/00	4:34	-0.27267	236.7269	0.24024		159.0697	0.52595	231543.1	-0.01587	1.2207	1.19746	3.28984	397.2913
OKOP454004	11/28/00	4:42	-0.44972	1269.116	0.85811		127.6477	0.69941	205170	-0.2201	1.11517	2.28697	3.06383	1723.858
OKOP454005	11/28/00	4:51	-0.51534	200.5912	1.41372		133.1636	0.39363	250506.3	-0.14208	1.00743	1.39384	3.25922	566.6985
OKOP454006 QC	11/28/00	4:59	-0.39819	316.2467	-1.17496		49.5552	0.52338	144832.1	-0.14891	-0.31142	2.00333	5.91421	593.399
OKOP454006 L	11/28/00	5:07	0.3743	212.5993	-5.50628		50.51207	1.96571	150832.8	0.21252	3.72438	1.39579	9.61255	642.9512
OKOP454006 MD	11/28/00	5:16	-0.16346	298.1688	-1.95422		50.6452	0.5605	153273.4	0.06438	-0.24643	1.82135	5.61798	660.3447
OKOP454006 MS	11/28/00	5:24	2028.703	2484.226	1996.584		2130.192	1997.871	152228.8	2002.023	2031.088	1952.423	2036.427	2640.769
OKOP454006 MSD	11/28/00	5:33	2038.129	2473.665	1996.266		2138.099	2030.082	155588.2	2042.477	2043.77	1980.415	2012.124	2690.886
OKOP231001	11/28/00	5:45	-0.72483	-20.7026	0.52674		99.46211	0.5082	180861.3	0.0432	1.84951	0.37514	625.7272	183.229
OKOP235001	11/28/00	5:53	-0.35412	-27.0174	-0.30346		65.61523	0.47352	219522.9	0.00239	0.54104	1.81518	3.19069	119.1098
CCV	11/28/00	6:02	610.5084	24473.46	2049.529		624.7145	207.6972	25863.32	629.4872	643.8342	592.6921	599.6338	9877.807
CCV1	11/28/00	6:10	0.09053	-29.9312	1.50186		0.25905	0.59458	17.20985	-0.02843	-0.00122	0.10743	0.97655	28.72519
CCB	11/28/00	6:18	0.36258	-31.1306	0.11443		-0.01592	0.65266	9.85063	-0.10121	0.59933	-0.05261	1.33044	2.5781
CRI	11/28/00	8:58	17.64829	-43.9889	19.03316		420.6421	11.02777	11.4048	10.28005	105.8116	18.09529	51.00121	31.73145
ICSA	11/28/00	9:05	-1.23229	96062.16	-1.43927		0.54607	0.91589	99791.84	0.23323	0.33665	-0.84106	-1.16843	38544.99
ICSA	11/28/00	9:12	612.4072	97213.83	2058.429		622.6027	207.0087	101739.4	628.8884	622.6212	595.6836	605.9696	39350.07
CCSAB	11/28/00	9:22	620.5031	24949.84	2145.387		630.1588	217.4317	27215.51	671.5392	675.8909	627.2146	613.8344	10305.84
CCV	11/28/00	9:49	624.589	25690.41	2082.95		622.3702	210.476	26680.32	634.9559	637.516	627.8161	600.7526	10482.41
CCV1	11/28/00	9:56	-1.02232	0.66596	0.66673		-0.08887	-0.08449	12.9592	-0.38507	-0.34324	-0.38001	-0.1873	-2.01565
CCB	11/28/00	10:03	2.09579	16.85744	3.76529		-0.01756	0.0384	16.99667	0.40322	1.35936	2.20596	1.71094	6.49072
OKOP367002	11/28/00	10:24	1.40367	618.674	0.16689		930.9916	-0.3301	312397.6	23.89548	64.83288	7.21897	214.0243	281.2126
OKOP367003 MS	11/28/00	10:32	2021.736	2650.56	2035.443		10732.57	2006.642	312361.8	2091.197	2071.917	2041.468	2210.43	2490.679
OKOP367005	11/28/00	10:40	-13.6506	770.9446	-1.06591		951.1685	-0.27745	346733.3	20.3614	59.01465	-3.64223	184.6199	356.4796
PB MS 11/22 T	11/28/00	10:49	0.02504	188.5722	-6.65394		24.37633	0.06339	332.7217	0.10801	0.12942	1.74983	5.19012	70.37709
LCS	11/28/00	10:57	2051.685	2123.95	2101.859		9669.771	2042.268	2455.647	2150.492	2070.805	2066.09	1957.332	2203.482
OKOP579002	11/28/00	11:06	0.54864	2446.91	-4.51792		2598.65	0.38915	131022.8	176.3486	17.87435	38.07018	11.59389	2766.571
OKOP579003 MS	11/28/00	11:14	2209.355	4644.098	2204.027		12924.05	2216.799	143206.1	2427.406	2215.327	2423.357	2307.577	5142.47
OKOP579005	11/28/00	11:22	3.08261	1564.989	-4.10635		2377.972	0.39259	204438.8	115.5384	12.59023	26.04393	44.89159	1363.734
CCV	11/28/00	11:31	621.5594	25717.7	2117.546		620.0208	213.0608	27111.67	647.2504	643.8947	631.2168	598.1294	10643.87
CCV1	11/28/00	11:39	0.4746	12.84241	0.22042		-0.27942	0.20981	31.20077	0.14603	0.78331	0.88411	1.21285	-28.9965
CCB	11/28/00	11:48	-0.25031	2.90415	-0.37373		0.13085	0.04068	16.39775	-0.3294	0.65621	0.31821	0.20035	23.88799



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Sample_Name	Date	Time	Potassium	agnesi	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
OK0P454001	11/28/00	3:26	3788.966	25597.11	523.5245	14.43306	9082.254	6.37053	2.16132	-1.25339	5.71265		1.66053	
OK0P454002	11/28/00	3:35	440.2482	47.58852	1.11425	1.03736	235.56	1.12487	1.94384	3.6372	-2.89254		1.86084	
CRI	11/28/00	3:43	456.0533	15.6295	29.25584	-0.2064	5.89855	80.03793	8.32482	122.6066	10.76599		20.56084	
ICSA	11/28/00	3:52	349.9426	103845	1.28904	-0.15895	14.761	0.74244	8.00693	0.72325	2.74523		6.19609	
ICSAB	11/28/00	4:00	39396.19	108124.3	394.7512	637.6146	10356.53	593.5229	2039.41	1048.943	1005.485		2027.859	
CCV	11/28/00	4:09	39004.27	27169.26	403.5829	3219.408	19863.35	616.4038	2081.365	10541.6	1026.144		2088.457	
CCV1	11/28/00	4:17	5343.042	9.07294	-0.11769	2.46707	7.67423	-0.52563	1.38493	2.13299	-0.87652		5.84946	
CCB	11/28/00	4:25	556.9893	8.16811	0.30493	0.42554	5.14442	0.33076	1.11443	2.06894	2.41094		1.83406	
OK0P454003	11/28/00	4:34	1404.374	19330.78	98.61888	1.19242	2335.379	5.38516	1.81829	0.62359	5.01105		-0.55688	
OK0P454004	11/28/00	4:42	2003.02	16627.18	138.9649	0.64776	3018.133	5.22209	2.46455	-1.04285	3.97646		-4.45903	
OK0P454005	11/28/00	4:51	4275.703	19579.47	158.4202	1.57942	6442.868	4.23572	1.52148	-1.6948	4.40732		-2.27564	
OK0P454006 QC	11/28/00	4:59	5075.743	18899.02	21.35931	0.58272	8534.568	4.03864	3.94623	-0.05328	3.38799		-5.34214	
OK0P454006 L	11/28/00	5:07	7318.172	19697.86	22.26033	-1.83352	8952.07	9.23335	17.70494	-9.06071	21.82261		6.47162	
OK0P454006 MD	11/28/00	5:16	5107.056	20155.12	22.83297	-0.08597	8876.646	5.50729	2.58892	2.13323	3.02224		0.20887	
OK0P454006 MS	11/28/00	5:24	24509.99	22048	1952.839	2072.547	11059.34	1958.042	1976.633	2032.912	1848.431		1991.675	
OK0P454006 MSD	11/28/00	5:33	24540.53	22387.13	1980.682	2109.793	11070.62	1997.423	2012.896	2048.355	1861.379		2006.26	
OK0P231001	11/28/00	5:45	15850.36	24858.76	17.15698	0.94112	32479.42	0.77496	1.84838	-2.82132	8.39443		-0.40459	
OK0P235001	11/28/00	5:53	72491.3	14929.4	126.704	3.62161	115375.4	4.32954	3.32817	4.79065	1.33236		-4.70878	
CCV	11/28/00	6:02	38898.91	27026.81	392.0339	3203.33	19932.18	601.3427	1972.55	10410.32	958.1887		2050.927	
CCV1	11/28/00	6:10	5197.829	7.53769	-0.07276	3.04468	5.04909	-0.01246	2.11494	3.76105	-0.88143		2.93684	
CCB	11/28/00	6:18	380.5305	5.25526	-0.0224	0.98189	2.04076	0.99564	0.58541	0.10116	3.70265		1.30373	
CRI	11/28/00	8:58	252.7621	-9.41113	28.76308	-0.07038	0.81791	79.67182	6.94967	120.3415	13.31145		19.53933	
ICSA	11/28/00	9:05	209.2798	109092.6	1.14524	-0.03673	11.31599	0.32914	6.66703	1.78596	-1.94635		-3.21167	
ICSAB	11/28/00	9:12	38988.15	110197.5	391.1289	652.9589	10272.38	594.6958	2058.618	1050.343	998.1967		2038.386	
CCV	11/28/00	9:22	39372.72	28591.48	407.2758	3355.729	20176.89	630.1958	2101.368	10737.04	1010.201		2148.566	
CCV	11/28/00	9:49	37863.56	26547.46	421.8751	3148.178	19496.36	623.1142	2092.367	10430.35	1035.89		2077.395	
CCV1	11/28/00	9:56	5463.019	-0.095	-0.15964	5.22271	10.16587	-0.31354	3.37335	0.41446	1.67506		-2.95958	
CCB	11/28/00	10:03	489.6273	19.29448	0.28028	2.97061	6.31803	1.44496	1.52381	4.96817	-3.68973		-2.0584	
OK0P367002	11/28/00	10:24	7591.302	11819.12	3245.49	1.39137	774751.8	63.72564	66443.02	6.55097	32.12398		1.35725	
OK0P367003 MS	11/28/00	10:32	7684.229	13787.6	5263.265	2057.172	770682.8	2087.353	68479.86	2040.144	2113.575		1976.375	
OK0P367005	11/28/00	10:40	8508.541	12857.94	4009.128	2.60594	796045.6	61.31202	91241.08	-9.80894	16.35387		-12.8875	
PB M5 11/22 T	11/28/00	10:49	8177.909	76.81845	5.66226	-1.14747	267627.3	7.13837	4.98605	4.37772	7.92013		-3.63445	
LCS	11/28/00	10:57	7939.262	2108.221	2117.927	2135.432	261892.1	2085.495	2113.863	2041.952	2055.406		2068.051	
OK0P579002	11/28/00	11:06	5296.609	3528.288	4425.342	2.23107	251260.3	69.54002	46571.01	1.98161	9.10205		-6.63914	
OK0P579003 MS	11/28/00	11:14	5881.803	5979.177	6848.323	2285.509	318750.8	2264.132	52799.18	2175.816	2151.769		2158.307	
OK0P579005	11/28/00	11:22	4289.464	3422.102	2424.416	2.5295	266829.3	64.84244	37217.53	8.97402	9.634		-2.43541	
CCV	11/28/00	11:31	38242.02	26767.95	425.0132	3207.604	19595.68	629.3683	2135.38	10526.25	1051.35		2108.037	
CCV1	11/28/00	11:39	5409.523	12.9434	0.34546	3.33505	92.30307	0.47672	1.03774	4.14363	2.80483		-4.43829	
CCB	11/28/00	11:48	567.3033	5.62265	0.00351	1.20321	54.99435	0.13624	1.17698	-0.5046	3.17922		-0.82848	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
0K0P454001	11/28/00	3:26	2.64887	31.83919	-2.61198	67425	-1.95135	4.21435	-2.0335	9.57975
0K0P454002	11/28/00	3:35	-0.41489	14.68625	-2.09911	65705.5	8.23621	-1.19784	-9.23122	0.27186
CRI	11/28/00	3:43	99.42697	41.97841	589.5448	65367	7.75584	8.60865	11.70339	10.29781
ICSA	11/28/00	3:52	0.61771	-1.13467	-0.59016	67035.5	2.90227	10.55516	7.23159	0.50523
ICSAB	11/28/00	4:00	602.7297	603.2435	974.1557	66090	2026.548	2045.831	1003.479	1006.487
CCV	11/28/00	4:09	605.7393	647.0214	7.54006	65614	2076.3	2083.893	1014.835	1031.79
CCV1	11/28/00	4:17	-0.42499	3.02734	4824.436	64676.5	5.26614	-0.55298	3.40703	-3.01528
CCB	11/28/00	4:25	0.57041	1.98482	-1.53622	64239.5	2.51097	0.41698	-0.35551	3.79192
0K0P454003	11/28/00	4:34	0.88672	23.33399	-3.8251	64703	2.6225	1.41656	1.16346	6.93177
0K0P454004	11/28/00	4:42	3.45268	34.02389	-2.9619	63401.5	-0.43949	3.91417	-5.59668	8.75568
0K0P454005	11/28/00	4:51	1.26381	26.15148	-3.15957	60532.5	0.34817	2.10701	-2.66704	7.939
0K0P454006 QC	11/28/00	4:59	1.25147	88.81774	-4.79107	61571.5	4.10662	3.86591	-1.99306	6.0743
0K0P454006 L	11/28/00	5:07	1.77729	102.0496	-5.89279	64752.5	23.43928	14.8409	33.74769	15.86808
0K0P454006 MD	11/28/00	5:16	0.8611	67.46769	-4.78397	67592.5	0.69597	3.53375	-0.39376	4.7275
0K0P454006 MS	11/28/00	5:24	1979.208	2050.444	1941.583	70772	1977.931	1975.985	1842.44	1851.421
0K0P454006 MSD	11/28/00	5:33	1995.225	2091.281	1983.358	65459.5	1998.109	2020.277	1852.349	1865.888
0K0P231001	11/28/00	5:45	0.44991	183.3685	0.86168	66201.5	0.39342	2.57454	3.10553	11.03474
0K0P235001	11/28/00	5:53	0.23495	16.16616	-3.98513	66270	5.68508	2.15126	2.5569	0.72083
CCV	11/28/00	6:02	586.8782	640.3069	10.95668	63566.5	2043.911	1936.923	995.4479	939.5869
CCV1	11/28/00	6:10	0.35547	2.97429	4885.576	72533	0.80576	2.76834	-1.92676	-0.35971
CCB	11/28/00	6:18	-0.43496	1.44171	-0.38236	69076	7.61614	-2.92489	3.04621	4.0302
CRI	11/28/00	8:58	99.30653	43.5043	599.6252	71513.5	8.91041	5.97056	15.19686	12.37
ICSA	11/28/00	9:05	-0.25774	-1.04355	-2.53344	72187.5	4.47196	7.76272	-0.56561	-2.63586
ICSAB	11/28/00	9:12	592.0058	625.624	983.9119	68323.5	2070.233	2052.818	1010.016	992.2955
CCV	11/28/00	9:22	606.8909	692.8015	11.51741	70774.5	2137.016	2083.57	1024.245	1003.189
CCV	11/28/00	9:49	621.3923	639.6776	7.35386	66834.5	2058.907	2109.071	1026.277	1040.689
CCV1	11/28/00	9:56	-1.30715	1.20562	5324.638	63687	2.57285	3.77276	-5.02201	5.01838
CCB	11/28/00	10:03	-0.43154	0.46192	3.09909	67100.5	9.01492	-2.21634	0.01022	-5.53711
0K0P367002	11/28/00	10:24	0.05854	7326.616	-3.67908	66389.5	66487.27	66420.92	21.35423	37.49987
0K0P367003 MS	11/28/00	10:32	2063.756	9344.271	2113.13	65942.5	68423.8	68507.86	2111.412	2114.654
0K0P367005	11/28/00	10:40	-1.03476	8749.98	-0.64854	63728.5	92973.69	90376.06	43.00393	3.04787
PB M5 11/22 T	11/28/00	10:49	-0.01079	31.0848	12.97433	66358	1.52	6.71626	4.45761	9.64862
LCS	11/28/00	10:57	2085.439	2227.195	2227.239	68573.5	2065.114	2138.201	2023.499	2071.336
0K0P579002	11/28/00	11:06	0.27001	5963.406	11.25389	68596	46739.23	46487.02	10.45192	8.42795
0K0P579003 MS	11/28/00	11:14	2239.147	8774.102	2339.481	59492.5	55582.9	51409.42	2308.441	2073.55
0K0P579005	11/28/00	11:22	0.9548	5428.451	12.90484	67008.5	37446.33	37103.3	13.80614	7.55087
CCV	11/28/00	11:31	625.8198	654.3027	6.74863	69442	2117.147	2144.483	1051.809	1051.12
CCV1	11/28/00	11:39	-2.5254	4.20351	5323.12	66974.5	9.33405	-3.10441	5.42181	1.49813
CCB	11/28/00	11:48	0.02438	7.97881	-1.5555	66087.5	2.82799	0.35248	2.76405	3.38631

Sample_Name	Date	Time	Silver	Aluminum	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromium	Copper	Iron
PB M9 11/22 S	11/28/00	11:58	191.8796	2421.982	335.8074		12.25091	8.96907	2582.235	16.51444	89.96675	80.91365	107.0891	2018.671
LCS	11/28/00	12:06	201238.4	197905.7	190580		207951.4	202994.8	206225.2	197879.1	197081.6	204473.9	206058.8	203995.3
OKOP550001 QC	11/28/00	12:14	-8.98114	2896.743	1201.934		2889.615	-21.6488	45210.25	34.50154	97.01255	258.6366	4063.36	89822.81
OKOP550001 L	11/28/00	12:23	-204.848	229.1871	1592.734		2588.286	-14.5952	42571.7	-73.9893	178.3976	-14.6751	3361.789	90998.97
OKOP550001 MD	11/28/00	12:31	-10.3961	3364.911	834.0205		2935.922	-35.0757	45871.51	5.65764	42.08141	257.9367	4127.911	91274.02
OKOP550001 MS	11/28/00	12:40	159585.4	155938.2	146817.8		157824.2	147482.3	201360.9	145809	147588.9	150719.7	159962.8	238894.2
OKOP550001 MSD	11/28/00	12:48	162097.9	159092.8	150131.4		160229.8	151199.4	206844.4	149774.5	151547.2	154182.8	161466.6	244779
PB M6 11/14 TT	11/28/00	12:56	-47.5667	14258.51	-274.54		301.7068	-12.2489	45791.67	19.80325	6.73486	137.5443	399.0804	46463.26
LCS	11/28/00	13:05	173259.8	218449.1	163908.5		176767.2	167533.2	214245	167535.6	168380	173821.9	172779.8	221648.4
LCS (NA)	11/28/00	13:13	-45.8722	18839.38	-170.527		263.9029	-2.91422	41373.32	28.81889	20.5559	12.38626	346.1686	47853.87
CCV	11/28/00	13:22	650.4195	26791.76	2117.825		652.2397	214.594	27084.56	636.0436	646.1868	642.9215	633.3889	10710.12
CCV1	11/28/00	13:30	-1.7295	2.19376	-3.76088		0.24938	-0.215	11.95062	-0.38189	-0.64738	-1.59044	-1.13859	26.21255
CCB	11/28/00	13:38	0.33236	10.37256	-0.04808		0.0226	-0.19335	6.41246	0.04915	0.84403	0.45776	0.42986	7.74899
OKOP310002	11/28/00	13:47	-96.0161	2857207	2478.131		37325.04	207.3098	2958545	905.7354	2748.389	10857.63	215503	5266509
OKOP310010	11/28/00	14:01	4.7986	8.66923	52.30447		0.16727	-0.17502	11.30477	5.23298	0.33942	4.74955	50.4739	21.24415
OKOP310010	11/28/00	14:13	237.8653	2472763	1073.07		41693.33	312.0152	9950842	1362.082	3605.034	21188.51	71856.99	5983680
OKOP310011	11/28/00	14:21	522.1544	3993190	2196.804		84349.63	212.9614	3362853	1595.564	7385.044	37495.67	97449.63	11458775
OKOP310012	11/28/00	14:30	66.30484	4144422	1799.042		121830.5	283.933	6469725	2292.686	5534.647	33034.96	87802.02	12316585
OKOP310013	11/28/00	14:38	116.5073	2406394	1207.712		28703.34	110.7589	3432982	388.1124	3350.243	15777.94	28736.37	5160763
OKOP310014	11/28/00	14:47	221.0778	4044412	2302.494		82498.86	223.6589	7670121	961.3239	5889.215	30523.51	55685.63	11126718
OKOP310015	11/28/00	14:55	411.3025	3404814	11880.99		112551.5	194.3383	5302803	2209.186	3558.913	34327.67	87351.3	7182543
OKOP310016	11/28/00	15:03	13834.12	2426723	4509.85		58380.55	143.126	2239875	1488.762	2804.878	18986.71	55680.23	6792188
OKOP367001	11/28/00	15:12	276.9901	10411791	26006.12		129166.6	357.3381	8521736	1297.139	21061.61	53203.59	108870.2	29907716
OKOP367004	11/28/00	15:20	87.53038	8767620	15132.43		104818	271.5084	10223212	989.1027	14904.33	45833.05	106670.6	24955212
CCV	11/28/00	15:29	623.863	25794.66	2029.97		622.8108	204.4552	25963.43	610.4287	619.1191	616.0796	606.1918	10242.33
CCV1	11/28/00	15:37	-0.02461	4.75296	-0.22357		0.60726	-0.05836	12.11764	0.03376	0.48746	-0.54928	-0.41228	16.58817
CCB	11/28/00	15:45	0.06879	-1.36143	0.61766		0.16133	0.01153	9.46021	0.09507	0.32226	0.2961	0.18884	31.68165
OKOP367004 L	11/28/00	15:54	-70.7251	8788733	14607.89		104857	314.2865	10531648	1070.593	15991.23	45754.95	105316.6	25454928
OKOP367004 MD	11/28/00	16:02	261.9329	8193723	15896.79		128615.1	271.105	9961556	1174.839	17632.59	53071.32	93637.55	32495820
OKOP367004 MS	11/28/00	16:11	173412.9	9293404	178401.9		311101.1	168190.5	10658452	165514.3	181827.6	212861.4	258129.8	20414330
OKOP367004 MSD	11/28/00	16:19	175333.8	9313706	185157.9		332509.8	169357.7	9864470	166606.7	190970.2	253651.3	577859.8	32818476
OKOP579002	11/28/00	16:31	-3.85917	2496.082	-11.3911		2691.126	-0.27828	132054.8	173.6625	17.27875	32.60241	8.15034	2983.03
OKOP579003 MS	11/28/00	16:39	2166.596	4617.692	2111.026		13392.44	2082.576	135576.3	2276.235	2119.171	2126.53	2120.461	4925.972
OKOP579005	11/28/00	16:47	-2.54233	1524.747	-10.3955		2402.524	-0.45489	193102	108.6431	11.13255	20.08702	41.21486	1363.834
PB M1 11/10 NN	11/28/00	16:59	0.2042	90.64339	0.07847		2.22256	-0.10778	343.5775	0.22428	0.70261	1.49421	3.66025	406.0399
CRI	11/28/00	17:08	21.46086	2.47047	18.48281		429.8299	10.49219	12.07342	11.17971	107.2244	21.38807	52.98041	23.01243
ICSA	11/28/00	17:16	-0.29413	104589.2	-0.48296		0.78546	0.01101	105688.5	-0.09327	0.40896	0.17338	-2.5562	41587.39
ICSAB	11/28/00	17:24	641.0138	104977.6	2070.504		636.9175	208.5994	104913	616.7063	612.2719	621.8713	613.2842	41255.32
CCV	11/28/00	17:33	625.6809	25562.43	2042.501		629.2875	206.4103	26072.82	615.2878	629.5754	621.4702	612.3336	10221.22

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybcdenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
PB M9 11/22 S	11/28/00	11:58	43469.39	1682.971	27.56257	219.9991	4690.359	162.2286	370.0351	615.7957	500.023		-727.162	
LCS	11/28/00	12:06	1615698	199185.7	202762.2	204177.3	202533.2	198517.6	195734	195078.9	177059		195338.9	
OKOP550001 QC	11/28/00	12:14	9566.217	7141.007	4499.646	228.7263	28893.75	559.2859	2468.925	250.7034	957.5474		302.4392	
OKOP550001 L	11/28/00	12:23	124696	7284.562	4064.788	-229.94	32300.22	773.5928	3184.205	-317.434	2081.928		2716.142	
OKOP550001 MD	11/28/00	12:31	7529.127	6910.721	4672.103	115.0482	29402.91	598.6169	2339.98	223.0635	1030.214		-283.42	
OKOP550001 MS	11/28/00	12:40	1355762	157121.7	156630.4	144320.7	186431.8	147296.5	146531.2	110000.6	141582.2		146877.5	
OKOP550001 MSD	11/28/00	12:48	1375865	161172.7	160636.7	148089	188790.2	151343.8	150557.4	112394	145513.4		149826.2	
PB M6 11/14 TT	11/28/00	12:56	45562.85	12113.31	227.8275	227.6273	29420.03	105.5411	409.3325	201.8632	165.5444		-716.071	
LCS	11/28/00	13:05	1606737	182137.7	172627.4	168382.8	193950.1	169304.1	169514.8	166161.4	155375.9		166617.8	
LCS (NA)	11/28/00	13:13	36092.57	10264.44	213.4167	107.8308	1653405	163.5927	464.2082	-16.0969	199.1386		-434.098	
CCV	11/28/00	13:22	39278.09	26906.76	430.5699	3235.24	20214.98	633.27	2105.096	10780.62	1044.673		2122.529	
CCV1	11/28/00	13:30	5358.675	-8.66	-0.20197	2.12208	18.93223	-0.6845	1.32157	-3.65946	0.80833		6.04671	
CCB	11/28/00	13:38	530.8881	3.81874	-0.04891	1.11514	17.57554	0.65327	1.89023	-0.67527	2.63803		-0.99512	
OKOP310002	11/28/00	13:47	302271.7	1248351	41075.99	1514.903	49603.57	8530.445	58402.27	2353.853	427.0777		-1.24224	
OKOP310010	11/28/00	14:01	665.7324	5.77531	-0.04681	-0.10501	33.3443	52.0503	52.45061	0.52432	53.3438		48.93396	
OKOP310010	11/28/00	14:13	315968.6	4682902	65203.47	3864.25	90279.02	19701.71	88851.72	3771.567	797.3884		3546.372	
OKOP310011	11/28/00	14:21	449286.1	2338706	112177.3	4048.181	171471.4	24528.61	135410	2829.892	-105.356		338.4938	
OKOP310012	11/28/00	14:30	514680	3749957	117197.8	4267.092	197974.1	25210.57	81431.73	3070.186	167.433		466.1465	
OKOP310013	11/28/00	14:38	381701.3	1271040	44475.58	1345.46	92035.87	11654.21	38785.08	1893.405	204.0912		-122.988	
OKOP310014	11/28/00	14:47	576580	4032406	171079.5	3542.494	167665.3	23275.8	1993525	2582.418	107.8371		441.753	
OKOP310015	11/28/00	14:55	459847.6	1524373	128698.6	1357.002	84817.94	15652.77	78635.58	4864.299	576.7249		133.1659	
OKOP310016	11/28/00	15:03	262986.7	1096707	28698.83	1911.975	102194.9	14577.96	126151.5	2846.067	381.1532		60.34171	
OKOP367001	11/28/00	15:12	584186.2	2838793	255377.4	1442.621	145695.3	19606.02	1519746	2235.789	1438.825		1977.083	
OKOP367004	11/28/00	15:20	553484	3074778	192863.8	1404.703	126196.3	17544.14	3089436	1504.163	739.6344		1181.704	
CCV	11/28/00	15:29	37645.93	25712.51	414.827	3079.807	19382.27	605.0701	2052.178	10326.4	1021.597		2040.199	
CCV1	11/28/00	15:37	5310.186	4.8119	-0.01856	2.88502	6.2885	-1.27373	1.43133	1.15644	-1.17681		1.15884	
CCB	11/28/00	15:45	375.2156	5.17272	-0.01935	1.27052	9.45582	0.72001	3.09194	-0.45147	0.83073		2.29186	
OKOP367004 L	11/28/00	15:54	739933.3	3184269	193543.5	1515.663	127456.2	18465.53	3143798	1964.704	1724.312		2227.181	
OKOP367004 MD	11/28/00	16:02	604883.8	3747155	1238355	1171.195	130640.1	17370.1	4837539	1778.932	819.7722		1339.003	
OKOP367004 MS	11/28/00	16:11	2174409	4289861	354343.9	168955.2	320504.1	181946.8	3432617	123401	148704.3		165028.6	
OKOP367004 MSD	11/28/00	16:19	2119660	2994030	444386.9	170398.2	325514.9	188576.3	8222456	105420.5	149319.3		167071.4	
OKOP579002	11/28/00	16:31	6631.932	3610.883	4428.996	2.26535	837886.3	70.83245	46566.95	-9.68315	20.14365		10.28432	
OKOP579003 MS	11/28/00	16:39	6548.796	5768.478	6585.112	2154.213	851851.6	2153.274	49577.91	2136.624	2187.268		2105.188	
OKOP579005	11/28/00	16:47	4991.356	3298.068	2323.231	4.58782	779807.6	57.59	34845.96	-13.4855	17.22582		-6.77394	
PB M1 11/10 NN	11/28/00	16:59	506.0054	95.41894	1.63011	0.83549	226.8552	1.2094	5.43335	4.51419	-0.89175		-8.06016	
CRI	11/28/00	17:08	544.1279	9.16403	32.14498	0.16833	16.78466	85.32318	10.74445	129.0233	13.65984		17.31523	
ICSA	11/28/00	17:16	511.4517	108032.8	1.56255	0.21416	28.40811	1.84465	8.81163	-4.27905	1.52938		1.41873	
ICSAB	11/28/00	17:24	39094.04	107572.6	420.1009	641.1162	10356.07	610.0068	2048.664	1065.891	1028.881		2055.019	
CCV	11/28/00	17:33	38121.95	26074.81	413.9263	3140.867	19565.37	605.0099	2053.528	10409.26	1026.64		2059.414	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
PB M9 11/22 S	11/28/00	11:58	-44.8391	287.1906	-215.675	62963	-100.453	604.9026	-1396.72	1446.951
LCS	11/28/00	12:06	203438.5	193309.3	-558.682	61244.5	194205.5	196497.1	177991.4	176593.5
OKOP550001 QC	11/28/00	12:14	125.2911	22642.64	1649.067	69689	2488.226	2459.268	1062.178	905.2934
OKOP550001 L	11/28/00	12:23	122.5741	21418.53	687.9897	68398.5	4242.116	2655.933	4236.111	1006.363
OKOP550001 MD	11/28/00	12:31	94.42498	23073.18	1809.263	70170.5	2222.372	2398.674	714.8688	1187.634
OKOP550001 MS	11/28/00	12:40	145368.8	164425.7	526.4304	69565	147150.3	146222	143374.1	140687.6
OKOP550001 MSD	11/28/00	12:48	148363.6	169245.5	715.3408	69260	150826.2	150423.2	146023.5	145258.7
PB M6 11/14 TT	11/28/00	12:56	87.38425	925.5786	3029.534	63660	61.20008	583.1146	-782.218	638.6968
LCS	11/28/00	13:05	172326.2	166507.9	173115.2	62547.5	170192.4	169176.4	157359	154385.8
LCS (NA)	11/28/00	13:13	54.16159	1269.564	2675.009	66949	-152.23	771.9431	-1066.54	831.0112
CCV	11/28/00	13:22	641.9959	630.8226	5.18214	62285.5	2078.545	2118.352	1044.767	1044.625
CCV1	11/28/00	13:30	0.2392	3.13781	5319.641	65729.5	-0.43372	2.19767	-2.03662	2.22849
CCB	11/28/00	13:38	0.1194	3.09903	-1.55981	63249.5	6.96984	-0.646	2.64066	2.63653
OKOP310002	11/28/00	13:47	14791.17	1340444	5690.748	67148	58412.06	58397.36	-236.593	758.3981
OKOP310010	11/28/00	14:01	0.56922	1.81141	-1.01021	61737	54.13364	51.6101	55.84687	52.09394
OKOP310010	11/28/00	14:13	21382.33	714119.5	7961.829	68223.5	72414.25	97058.11	-1210.44	1799.78
OKOP310011	11/28/00	14:21	31042.41	877627.8	11154.47	66239.5	135259.3	135485.1	94.21396	-205.01
OKOP310012	11/28/00	14:30	30807.51	1695303	9017.15	68156	82181.38	81057.45	384.8163	58.88705
OKOP310013	11/28/00	14:38	15706.86	306957	4964.333	66320.5	38650.76	38852.12	-510.81	560.9879
OKOP310014	11/28/00	14:47	31748.45	517003.4	8591.098	68493.5	1992116	1994228	-17.6296	170.4575
OKOP310015	11/28/00	14:55	15869.35	464462.8	26962.71	67883	78655.13	78625.8	428.9352	650.4913
OKOP310016	11/28/00	15:03	12933.11	855671.3	8186.233	70371.5	125705.7	126374	-40.9238	591.858
OKOP367001	11/28/00	15:12	22706.17	926975.2	8975.768	68375.5	1503096	1528058	2612.775	852.7131
OKOP367004	11/28/00	15:20	21931.64	782001.5	8883.363	68064.5	3092884	3087715	1773.443	223.4879
CCV	11/28/00	15:29	615.4359	603.3729	6.81475	68212	2025.225	2065.634	1020.194	1022.297
CCV1	11/28/00	15:37	0.23493	3.21657	5222.424	66363.5	1.07836	1.60732	0.24161	-1.88514
CCB	11/28/00	15:45	0.66713	4.46012	0.78838	66734	2.41718	3.42859	-0.4459	1.46791
OKOP367004 L	11/28/00	15:54	22052.02	837280.8	9256.109	67992	3198327	3116575	2939.339	1117.623
OKOP367004 MD	11/28/00	16:02	24243.47	885189.5	6987.321	65843.5	4790115	4861215	1642.802	408.8563
OKOP367004 MS	11/28/00	16:11	192383.6	975863.1	178469.3	64188.5	3406107	3445852	150054.4	148030.3
OKOP367004 MSD	11/28/00	16:19	194078.4	1541881	181970.8	65354	8208989	8229179	151791.3	148085.1
OKOP579002	11/28/00	16:31	7.20084	5890.166	-1.50457	64343	46973.16	46364.15	-25.591	42.97575
OKOP579003 MS	11/28/00	16:39	2161.98	7999.241	2148.103	64007.5	49273.07	49730.12	2183.199	2189.298
OKOP579005	11/28/00	16:47	0.06223	4957.383	-4.731	65484	34622.09	34957.72	13.33554	19.16713
PB M1 11/10 NN	11/28/00	16:59	-0.35377	9.5381	23.34458	62720	10.14381	3.08141	-2.93657	0.12893
CRI	11/28/00	17:08	107.5668	42.71267	644.276	62334	8.26839	11.98038	11.66646	14.65484
ICSA	11/28/00	17:16	0.03589	-0.71694	-0.48735	62055	5.69319	10.36822	0.72701	1.92976
ICSAB	11/28/00	17:24	626.8309	598.2505	1042.145	62302.5	2046.363	2049.813	1042.943	1021.86
CCV	11/28/00	17:33	615.1301	612.4495	5.87225	63045	2055.251	2052.667	1036.423	1021.756

Sample_Name	Date	Time	Silver	Aluminum	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromium	Copper	Iron
CCV1	11/28/00	17:41	-0.10399	2.99256	-2.3663		0.43305	-0.17092	14.84469	0.12024	0.94529	-0.37696	0.41934	46.88354
CCB	11/28/00	17:50	-0.72217	-4.32582	-0.81567		0.11079	-0.00356	5.53951	-0.30484	0.138	-0.74839	-0.19387	9.62947
LCS	11/28/00	17:58	1037.474	1237.15	992.2627		1062.786	1010.498	1397.917	1027.435	1019.104	1041.346	1033.701	1376.764
OKOP267001	11/28/00	18:06	0.57448	115.4401	1.46083		14.64978	-0.24028	27167.48	-0.03548	0.15729	0.8136	10.95547	166.0501
OKOP267001 L	11/28/00	18:15	-0.82639	93.37598	-4.25373		14.34787	0.50175	26607.41	-0.20157	0.3982	-2.30898	8.04852	264.7454
OKOP267001 MD	11/28/00	18:23	0.88749	107.5061	1.25645		14.37817	-0.17576	26391.16	0.38463	0.07579	1.22873	10.62418	155.2648
OKOP267001 MS	11/28/00	18:32	2155.419	2216.218	2064.927		2193.354	2078.893	28412.16	2079.384	2096.969	2105.478	2138.966	2303.422
OKOP267001 MSD	11/28/00	18:40	2230.923	2284.005	2129.207		2259.931	2148.317	30110.52	2132.481	2164.763	2191.034	2223.544	2378.534
OKOP294002	11/28/00	18:48	0.00067	58.54776	-0.22116		10.33035	-0.06618	34812.55	-0.02251	0.76481	1.47383	3.94084	115.8765
OKOP237002	11/28/00	18:57	0.81355	25.39769	3.43185		90.78497	-0.39909	151297.6	-0.02378	1.52226	1.67527	12.66876	93.00491
OKOP238001	11/28/00	19:05	0.08563	95.76199	-1.31361		8.41317	-0.29531	26951.1	0.09314	1.29692	2.08688	5.27898	212.2179
OKOP239001	11/28/00	19:14	1.06307	100.6336	-0.02398		8.5724	-0.17643	27198.92	-0.18685	1.16671	3.1048	7.4022	220.9345
CRI	11/28/00	19:22	20.61217	-7.14197	22.66067		446.1284	10.51254	15.57896	10.94161	108.2722	20.91346	54.07884	38.97689
ICSA	11/28/00	19:30	0.93892	100821.3	3.50564		0.97566	0.00503	101547.8	0.13306	1.90988	1.83205	-1.29095	40016.17
ICSAB	11/28/00	19:39	626.6517	101331.7	1996.345		621.2182	202.1974	101602.8	594.503	589.7357	602.7264	597.7665	40350.09
CCV	11/28/00	19:47	659.8501	26919.61	2149.316		666.9223	220.0221	27788.16	654.5988	665.8702	661.1727	648.845	10940.43
CCV1	11/28/00	19:56	-1.51375	0.92349	0.43449		0.32563	-0.03743	27.52754	-0.0652	-0.45165	-1.05683	-0.20578	37.96178
CCB	11/28/00	20:04	-1.65664	-5.99238	0.65239		-0.04323	-0.01088	2.52455	-0.43568	-0.69926	-1.15363	-0.18943	11.85234

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
CCV1	11/28/00	17:41	5483.809	8.53778	-0.00319	3.04448	12.43392	1.01565	3.0211	3.03768	-2.55718		-0.52551	
CCB	11/28/00	17:50	343.2056	7.19643	-0.09818	0.87034	4.02659	-0.57777	0.85061	-0.43513	3.25121		-2.08365	
LCS	11/28/00	17:58	10118.42	1118.502	1049.703	1036.047	1227.76	1020.111	1019.352	1006.072	925.5267		1006.764	
OKOP267001	11/28/00	18:06	12429.36	8225.912	23.04496	2.45484	50584.2	2.10144	5.3071	0.6575	4.92118		-1.87263	
OKOP267001 L	11/28/00	18:15	14742.05	8128.807	22.54487	0.02599	55844.67	-1.83872	8.83016	7.81696	7.72937		-4.67883	
OKOP267001 MD	11/28/00	18:23	12033.42	7980.536	22.3752	2.50949	49326.86	3.65436	6.37523	0.06963	3.4003		-2.16269	
OKOP267001 MS	11/28/00	18:32	31309.41	10068.23	2169.824	2154.173	50875.29	2081.923	2094.601	2116.918	1993.053		2081.064	
OKOP267001 MSD	11/28/00	18:40	32431	10736.81	2205.407	2213.875	53401.2	2147.223	2144.898	2179.334	2049.592		2128.852	
OKOP294002	11/28/00	18:48	23918.78	9775.511	38.28221	43.46482	142117.1	2.47619	1.10443	2.57051	-1.87914		1.5581	
OKOP237002	11/28/00	18:57	14821.69	18903.17	121.9525	62.72277	155129.8	72.10273	4.41556	-0.53589	4.27749		0.08634	
OKOP238001	11/28/00	19:05	15344.62	16179.87	26.05413	22.31774	82140.24	3.63344	2.48664	2.37157	3.71291		-4.71149	
OKOP239001	11/28/00	19:14	15236.69	16097.69	27.11787	22.05717	81576.55	2.88618	3.1896	3.6427	2.74225		1.5881	
CRI	11/28/00	19:22	671.0336	5.70638	32.95956	0.14483	29.48429	88.06612	8.64822	129.0655	13.92518		22.98834	
ICSA	11/28/00	19:30	554.8944	103964.3	1.81453	1.42183	30.68617	3.06926	7.44668	2.95743	2.11209		2.30256	
ICSAB	11/28/00	19:39	38254.43	103082.9	409.2914	617.9539	10114.05	588.6506	1985.841	1033.89	989.0928		1997.931	
CCV	11/28/00	19:47	40047.59	27616.19	441.4097	3319.586	20733.54	647.7982	2170.381	10971.95	1072.902		2174.874	
CCV1	11/28/00	19:56	5556.305	0.13111	0.02703	4.49277	36.06094	0.08734	2.06326	-1.58379	3.61285		3.50293	
CCB	11/28/00	20:04	545.9297	-2.98459	-0.22193	0.03233	3.98283	-0.45776	0.42558	0.87647	4.53649		0.72687	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
CCV1	11/28/00	17:41	1.37757	3.13687	5259.887	61798	0.46875	4.29512	-6.67327	-0.50241
CCB	11/28/00	17:50	0.34627	2.36441	-2.37101	65285.5	-1.96611	2.25664	-1.46354	5.60487
LCS	11/28/00	17:58	1038.518	1020.839	1074.226	61125	1020.041	1019.007	932.9601	921.8154
OK0P267001	11/28/00	18:06	0.78465	191.1423	-1.48158	63848.5	3.98083	5.969	1.35647	6.70068
OK0P267001 L	11/28/00	18:15	2.25113	195.3657	5.64615	64810.5	-5.45283	15.95979	17.53817	2.83139
OK0P267001 MD	11/28/00	18:23	0.68457	187.0915	-1.11917	61494.5	10.04143	4.54463	-1.92601	6.05927
OK0P267001 MS	11/28/00	18:32	2140.147	2246.502	2149.623	64012	2082.058	2100.862	2001.427	1988.873
OK0P267001 MSD	11/28/00	18:40	2198.833	2322.268	2197.953	62080	2140.263	2147.212	2063.514	2042.64
OK0P294002	11/28/00	18:48	2.60231	53.08344	0.03785	63095.5	0.05844	1.6264	-3.93911	-0.8509
OK0P237002	11/28/00	18:57	0.2216	62.22343	0.12257	62391.5	7.32392	2.96333	7.90838	2.46458
OK0P238001	11/28/00	19:05	1.29463	67.27958	-0.32976	59151.5	-0.46145	3.95823	0.49574	5.31888
OK0P239001	11/28/00	19:14	0.80709	68.78231	-2.66028	59716	-0.11697	4.84015	-0.14017	4.18111
CRI	11/28/00	19:22	112.0613	43.91925	666.9388	58606	2.05594	11.93917	11.44309	15.16415
ICSA	11/28/00	19:30	0.43653	-1.00055	5.78565	60989	9.07666	6.63264	5.53174	0.40463
ICSAB	11/28/00	19:39	609.6873	576.5966	1002.469	60304.5	1974.457	1991.524	989.7611	988.7589
CCV	11/28/00	19:47	650.6589	657.9565	6.92947	59494	2135.146	2187.971	1064.571	1077.061
CCV1	11/28/00	19:56	0.46122	4.80313	5207.645	60001.5	5.20239	0.4958	0.82285	5.00555
CCB	11/28/00	20:04	-0.47036	1.71304	2.37643	61721	-2.91216	2.09171	2.66612	5.47008

Method: 6010B

Slope = Conc(SLR)/1R

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	Multiple	Standards	1417.51	.355047	11/27/00 04:28:53
Al	308.215	Multiple	Standards	182140.	128.296	11/27/00 04:28:53
As	189.042	Multiple	Standards	5200.64	8.63999	11/27/00 04:28:53
Ba	493.409	Multiple	Standards	1513.71	-.178384	11/27/00 04:28:53
Be	313.042	Multiple	Standards	1016.85	4.14860	11/27/00 04:28:53
Ca	317.933	Multiple	Standards	18440.4	-43.0424	11/27/00 04:28:53
Cd	226.502	Multiple	Standards	650.018	-.103364	11/27/00 04:28:53
Co	228.616	Multiple	Standards	3687.96	.736608	11/27/00 04:28:53
Cr	267.716	Multiple	Standards	2985.36	-1.27066	11/27/00 04:28:53
Cu	324.754	Multiple	Standards	2697.38	-4.35931	11/27/00 04:28:53
Fe	271.441	Multiple	Standards	68991.2	29.6594	11/27/00 04:28:53
K	766.491	Multiple	Standards	3917.39	-1345.77	11/27/00 04:45:30
Mg	279.079	Multiple	Standards	26271.5	3.000079	11/27/00 04:28:53
Mn	257.610	Multiple	Standards	2700.72	-.221707	11/27/00 04:28:53
Mo	202.030	Multiple	Standards	5640.42	-.378202	11/27/00 04:28:53
Na	588.995	Multiple	Standards	1228.66	-91.8164	11/27/00 04:28:53
Ni	231.604	Multiple	Standards	2298.04	.871460	11/27/00 04:28:53
2203/1	220.351	Multiple	Standards	1220.50	.444283	11/27/00 04:28:53
2203/2	220.352	Multiple	Standards	4966.79	2.04839	11/27/00 04:28:53
Sb	206.838	Multiple	Standards	10473.0	-1.40309	11/27/00 04:28:53
1960/1	196.021	Multiple	Standards	7168.64	4.72477	11/27/00 04:28:53
1960/2	196.022	Multiple	Standards	3531.32	-.790116	11/27/00 04:28:53
Pb	220.353	NONE	NONE	1.000000	.0000000	*NOT STANDARDIZED
Se	196.026	NONE	NONE	1.000000	.0000000	*NOT STANDARDIZED
Sn	189.989	Multiple	Standards	6555.03	-.2.60204	11/27/00 04:45:30
Tl	190.864	Multiple	Standards	9712.23	6.06622	11/27/00 04:28:53
V	292.402	Multiple	Standards	14281.6	.454291	11/27/00 04:28:53
Zn	206.200	Multiple	Standards	8031.52	-.955371	11/27/00 04:28:53

Method: 6010B

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ag	328.068	BLANK	.0000000	- .001789	.001789
		STD 3	375.000	375.655	- .654755
		STD 4	750.000	749.952	.048035
		STD 5	1500.00	1501.15	-1.15112
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Al	308.215	BLANK	.0000000	- .280423	.280423
		STD 3	6250.00	6309.91	- .99.9106
		STD 4	12500.0	12478.6	.27.4160
		STD 5	25000.0	24976.8	.23.2461
CorCoef: 0.99999					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
As	189.042	BLANK	.0000000	- .003705	.003705
		STD 3	1250.00	1243.29	.71106
		STD 4	2500.00	2526.73	- .76.7305
		STD 5	5000.00	4967.38	.32.4731
CorCoef: 0.99995					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ba	493.469	BLANK	.0000000	- .014702	.014702
		STD 3	375.000	377.377	- .2.37665
		STD 4	750.000	749.769	.231261
		STD 5	1500.00	1494.56	.56.4392
CorCoef: 1.00000					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Be	313.042	BLANK	.0000000	- .001896	.001896
		STD 3	125.000	124.266	.73.3971
		STD 4	250.000	252.420	- .3.46012
		STD 5	500.000	496.890	.3.10464
CorCoef: 0.99993					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ca	317.933	BLANK	.0000000	- .049641	.049641
		STD 3	6250.00	6217.36	.38.6431
		STD 4	12500.0	12665.9	- 165.891
		STD 5	25000.0	24813.4	.186.588
CorCoef: 0.99993					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cd	226.502	BLANK	.0000000	- .006350	.006350
		STD 3	375.000	373.531	.1.16943
		STD 4	750.000	762.535	- 12.5348
		STD 5	1500.00	1480.87	.19.7346
CorCoef: 0.99986					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Co	228.616	BLANK	.0000000	- .012021	.012021
		STD 3	375.000	372.485	.2.51471
		STD 4	750.000	755.994	- 5.99486
		STD 5	1500.00	1493.85	.1.14563
CorCoef: 0.99998					

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Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	BLANK	.0000000	.008755	-.008755
		STD 3	375.000	374.149	.851196
		STD 4	750.000	748.103	1.89709
		STD 5	1500.00	1507.20	-7.19885
CorCoef: 0.99999					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Cu	324.754	BLANK	.0000000	-.015288	.015288
		STD 3	375.000	379.533	-4.55273
		STD 4	750.000	737.516	12.4843
		STD 5	1500.00	1510.66	-10.6605
CorCoef: 0.99990					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Fe	271.441	BLANK	.0000000	-.184178	.184178
		STD 3	2500.00	2533.62	-33.6167
		STD 4	5000.00	5118.80	-118.801
		STD 5	10000.0	9959.67	40.3320
CorCoef: 0.99988					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
K	766.491	BLANK	.0000000	-.303247	.303247
		STD 6	2500.00	2531.59	-31.5928
		STD 7	5000.00	5053.06	-103.0616
		STD 8	10000.0	9767.32	232.481
CorCoef: 0.99981					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mg	279.079	BLANK	.0000000	-.451021	.451021
		STD 3	6250.00	6174.21	75.7915
		STD 4	12500.0	12589.5	-89.4041
		STD 5	25000.0	25117.5	-117.541
CorCoef: 0.99999					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mn	257.610	BLANK	.0000000	-.006905	.006905
		STD 3	250.000	250.075	-0.05499
		STD 4	500.000	501.055	-0.05499
		STD 5	1000.00	999.377	10.4229
CorCoef: 0.99993					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Mo	202.030	BLANK	.0000000	-.004132	.004132
		STD 3	750.000	746.762	3.23846
		STD 4	1500.00	1515.81	-15.8051
		STD 5	3000.00	2981.34	18.6567
CorCoef: 0.99995					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Na	588.995	BLANK	.0000000	-.244309	.244309
		STD 3	2500.00	2533.17	-33.1677
		STD 4	5000.00	4996.44	3.56799
		STD 5	10000.0	9874.45	125.546
CorCoef: 0.99996					

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Ni	231.604	BLANK	.000000	- .000360	.000360
		STD 3	375.000	374.097	.903076
		STD 4	750.000	760.581	-10.5807
		STD 5	1500.00	1480.16	19.8384
CorCoef: 0.99988					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/1	220.351	BLANK	.000000	.100480	-.100480
		STD 3	1250.00	1236.12	13.8792
		STD 4	2500.00	2525.06	-25.0093
		STD 5	5000.00	5045.20	-45.2510
CorCoef: 0.99998					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/2	220.352	BLANK	.000000	.095473	-.095473
		STD 3	1250.00	1226.36	23.1387
		STD 4	2500.00	2501.00	-19.0017
		STD 5	5000.00	4973.37	26.1270
CorCoef: 0.99987					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	BLANK	.000000	-.013630	.013630
		STD 3	2500.00	2490.36	9.44360
		STD 4	5000.00	5010.88	-10.8648
		STD 5	10000.00	9930.98	69.0166
CorCoef: 0.99999					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/1	196.021	BLANK	.000000	.034516	-.034516
		STD 3	625.000	621.079	3.92084
		STD 4	1250.00	1245.04	4.96167
		STD 5	2500.00	2524.30	-24.2957
CorCoef: 0.99997					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/2	196.022	BLANK	.000000	.024511	-.024511
		STD 3	625.000	618.493	6.50476
		STD 4	1250.00	1264.44	-14.4374
		STD 5	2500.00	2489.67	10.3298
CorCoef: 0.99995					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se	196.026	NONE	.000000	.000000	.000000
		NONE	.000000	.000000	.000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	BLANK	.0000000	.151215	-.151215
		STD 6	2500.00	2468.13	31.8679
		STD 7	5000.00	5070.24	-70.2358
		STD 8	10000.0	9937.00	12.9990
CorCoef: 0.99995					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.864	BLANK	.0000000	.0055571	-.0055571
		STD 3	1250.00	1244.37	5.63220
		STD 4	2500.00	2527.95	-27.9517
		STD 5	5000.00	4964.33	35.4683
CorCoef: 0.99994					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	BLANK	.0000000	-.003718	.003718
		STD 3	375.000	374.808	.192047
		STD 4	750.000	754.604	-4.60431
		STD 5	1500.00	1492.88	7.72424
CorCoef: 0.99998					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	206.200	BLANK	.0000000	.006881	-.006881
		STD 3	375.000	372.473	2.92773
		STD 4	750.000	767.887	-17.8873
		STD 5	1500.00	1484.93	15.0617
CorCoef: 0.99981					

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Slope = Conc(SIR)/1R

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	Multiple	Standards	1417.51	-385.047	11/27/00 04:28:53
Al	308.215	Multiple	Standards	182140.	128.296	11/27/00 04:28:53
As	189.042	Multiple	Standards	5200.64	2.63999	11/27/00 04:28:53
Ba	493.409	Multiple	Standards	1513.71	-1.173.500	11/27/00 04:28:53
Be	313.042	Multiple	Standards	1016.85	4.14660	11/27/00 04:28:53
Ca	317.933	Multiple	Standards	18440.4	-4.6.0424	11/27/00 04:28:53
Cd	226.502	Multiple	Standards	650.018	-1.103364	11/27/00 04:28:53
Co	228.616	Multiple	Standards	3637.96	-7.365003	11/27/00 04:28:53
Cr	267.716	Multiple	Standards	2985.36	-1.870066	11/27/00 04:28:53
Cu	324.754	Multiple	Standards	2697.83	-4.35931	11/27/00 04:28:53
Fe	271.441	Multiple	Standards	68991.2	29.6584	11/27/00 04:28:53
K	766.491	Multiple	Standards	3917.09	-1695.77	11/27/00 04:28:53
Mg	279.079	Multiple	Standards	26271.0	3.00079	11/27/00 04:28:53
Mn	257.610	Multiple	Standards	8700.73	-1.291707	11/27/00 04:28:53
Mo	202.030	Multiple	Standards	5640.47	-1.370007	11/27/00 04:28:53
Na	588.995	Multiple	Standards	1.048.66	-01.0164	11/27/00 04:28:53
Ni	231.604	Multiple	Standards	2298.04	.771460	11/27/00 04:28:53
Pb03/1	220.351	Multiple	Standards	1240.70	-444003.6	11/27/00 04:28:53
Pb03/2	220.352	Multiple	Standards	4966.79	2.00039	11/27/00 04:28:53
Pb	206.838	Multiple	Standards	16473.0	-1.40309	11/27/00 04:28:53
1960/1	196.021	Multiple	Standards	7188.68	4.78477	11/27/00 04:28:53
1960/2	196.022	Multiple	Standards	3561.34	-7.90016	11/27/00 04:28:53
Po	220.353	NONE	NONE	1.0000000	0.0000000	NOT STANDARDIZED
Se	196.026	NONE	NONE	1.0000000	0.0000000	NOT STANDARDIZED
Sn	189.989	Multiple	Standards	6165.03	-7.80014	11/27/00 04:28:53
Tl	190.864	Multiple	Standards	9700.03	0.000000	11/27/00 04:28:53
—	292.402	Multiple	Standards	14281.6	.454291	11/27/00 04:28:53
In	206.200	Multiple	Standards	3651.50	-4.950371	11/27/00 04:28:53

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int Wavelength
328.068 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	.001789	.001789
	.375.000	.375.000	.354755
	.750.000	.749.958	.048030
	1.500.000	1.501.100	.151112

coef: 1.00000

int Wavelength
308.215 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	.280423	.280423
	.6250.000	.6250.01	.59.9106
	1.2500.000	1.2478.6	.4160.01
	2.5000.000	2.4976.3	.2461

coef: 0.99999

int Wavelength
189.042 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	.0003700	.0003700
	1.2500.000	1.2400.00	.71106
	2.5000.000	2.496.73	.7300.00
	5.0000.000	4.987.30	.4751

coef: 0.99995

int Wavelength
493.409 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	-.014700	-.014700
	.375.000	.377.377	.376.7300
	.750.000	.749.769	.749.769
	1.500.000	1.494.36	.36.4751

Coef: 1.00000

int Wavelength
313.042 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	.001896	.001896
	1.25.000	1.24.026	.33.971
	2.50.000	2.49.470	.4700.00
	5.00.000	4.98.993	.993

Coef: 0.99993

int Wavelength
317.933 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	.049643	.049643
	6.250.000	6.217.36	.6431
	12.500.000	12.660.9	.1600.00
	25.000.000	24.813.4	.186.388

Coef: 0.99993

int Wavelength
226.502 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	-.0003700	-.0003700
	.375.000	.375.331	.375.331
	.750.000	.760.026	.00.000
	1.500.000	1.490.27	.27

rCoef: 0.99986

int Wavelength
228.616 Standard
BLANK
STD 3
STD 4
STD 5

	Known Concentration	Measured Concentration	Residual Concentration
	.000000	.017001	.017001
	.375.000	.372.463	.314.71
	.750.000	.760.944	.00.000
	1.500.000	1.493.83	.14363

rCoef: 0.99998

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ndardization		Readback Report		11/27/00 04:50:17 PM	page 2
		Known Concentration	Measured Concentration	Residual Concentration	
ment	Wavelength 267.716	Standard BLANK	.000000	.000000	- .000000
	STD 3	.375.000	.374.149	.001196	
	STD 4	.750.000	.748.103	.0019709	
	STD 5	1500.000	1507.104	- .19885	
Coef: 0.99999					
ment	Wavelength 324.754	Standard BLANK	.000000	- .000000	- .000000
	STD 3	.375.000	.375.000	- .000273	
	STD 4	.750.000	.737.016	.0124043	
	STD 5	1500.000	1510.55	- .6605	
Coef: 0.99990					
ment	Wavelength 271.441	Standard BLANK	.000000	- .184178	- .184178
	STD 3	.2500.000	.2534.80	- .000167	
	STD 4	.5000.000	.5118.80	- .018001	
	STD 5	10000.000	9939.67	.400.53E0	
Coef: 0.99985					
ment	Wavelength 766.491	Standard BLANK	.000000	- .303247	- .303247
	STD 6	.2500.000	.2531.79	- .000528	
	STD 7	.5000.000	.5003.46	- .000001	
	STD 8	10000.000	9787.00	.2324.481	
Coef: 0.99981					
ment	Wavelength 279.079	Standard BLANK	.000000	- .400000	- .400000
	STD 3	.6250.000	.6174.31	- .0007515	
	STD 4	12500.000	12089.0	- .89.40141	
	STD 5	25000.000	25117.0	- 117.541	
Coef: 0.99999					
ment	Wavelength 257.610	Standard BLANK	.000000	- .000000	- .000000
	STD 3	.0000.000	.0000.000	- .000000	
	STD 4	.0000.000	.0000.000	- .000000	
	STD 5	10000.000	9395.377	.00.4229	
Coef: 0.99993					
ment	Wavelength 202.030	Standard BLANK	.000000	.000000	- .000000
	STD 3	.750.000	.746.762	.00023846	
	STD 4	1500.000	1515.81	- .0008801	
	STD 5	3000.000	2981.54	.00.5067	
Coef: 0.99995					
ment	Wavelength 588.995	Standard BLANK	.000000	- .244309	- .244309
	STD 3	.2500.000	.2533.17	- .0001677	
	STD 4	.5000.000	.4996.44	.0006899	
	STD 5	10000.000	9374.45	.000.546	
Coef: 0.99996					

Element Wavelength Standard
 Ni 231.604 BLANK
 STD 3
 STD 4
 STD 5

CorCoef: 0.99988

Element Wavelength Standard
 2203/1 220.351 BLANK
 STD 3
 STD 4
 STD 5

CorCoef: 0.99998

Element Wavelength Standard
 2203/2 220.352 BLANK
 STD 3
 STD 4
 STD 5

CorCoef: 0.99987

Element Wavelength Standard
 Sb 206.838 BLANK
 STD 3
 STD 4
 STD 5

CorCoef: 0.99999

Element Wavelength Standard
 1960/1 196.021 BLANK
 STD 3
 STD 4
 STD 5

CorCoef: 0.99997

Element Wavelength Standard
 1960/2 196.022 BLANK
 STD 3
 STD 4
 STD 5

CorCoef: 0.99995

Element Wavelength Standard
 Pb 220.353 NONE
 NONE

Element Wavelength Standard
 Se 196.026 NONE
 NONE

Known Concentration	Measured Concentration	Residual Concentration
.0000000	- .000360	.000360
.375.000	.374.097	.0003476
.750.000	.760.081	.0003477
1500.000	1430.116	.0003384

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.1000000	.1000000
1250.000	1236.112	.0003792
2500.000	2505.066	.0003693
5000.000	5040.120	.0002510

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.000473	.000473
1250.000	1236.112	.0003387
2500.000	2505.066	.0003693
5000.000	4973.37	.0001270

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.0013630	.0013630
2500.000	2490.106	.00044360
5000.000	5010.108	.0000046
10000.000	9930.93	.0000166

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.0004016	.0004016
625.000	621.079	.0003084
1250.000	1240.04	.00026167
2500.000	2504.130	.0002957

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.0004011	.0004011
625.000	618.493	.00030476
1250.000	1264.44	.00024374
2500.000	2430.57	.0001696

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.0000000	.0000000
.0000000	.0000000	.0000000

Known Concentration	Measured Concentration	Residual Concentration
.0000000	.0000000	.0000000
.0000000	.0000000	.0000000

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	BLANK	.0000000	.151815	- .151815
		STD 6	2500.00	2463.13	- 36.8679
		STD 7	5000.00	5070.24	- 70.2058
		STD 8	10000.00	9937.00	12.9990
<i>CorCoef: 0.99995</i>					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Tl	190.864	BLANK	.0000000	.0000000	- .0000000
		STD 3	1250.00	1144.37	- 105.6280
		STD 4	2500.00	2527.95	- 27.9517
		STD 5	5000.00	4964.33	- 35.4683
<i>CorCoef: 0.99994</i>					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
V	292.402	BLANK	.0000000	-.003718	.003718
		STD 3	375.000	374.503	- .49647
		STD 4	750.000	754.604	- 4.60401
		STD 5	1500.000	1493.413	- 7.58424
<i>CorCoef: 0.99995</i>					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Zn	205.200	BLANK	.0000000	.0000000	- .0000000
		STD 3	375.000	374.503	- .49647
		STD 4	750.000	767.287	- 17.7873
		STD 5	1500.000	1484.933	- 15.0617
<i>CorCoef: 0.99951</i>					

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
BLANK	11/22/00	23:48	0.00362	-0.00046	0.00163		0.00068	-0.00398	0.00293	0.00191	0.00099	0.0022	0.0034	0.00092
STD 3	11/22/00	23:55	0.2865	0.03659	0.2974		0.252	0.14237	0.41823	0.74326	0.12034	0.14724	0.14536	0.04326
STD 4	11/23/00	0:02	0.57816	0.07494	0.60552		0.50515	0.29352	0.85196	1.52025	0.24608	0.3088	0.30029	0.08818
STD 5	11/23/00	0:09	1.17073	0.15204	1.23603		1.0138	0.60225	1.73013	3.07245	0.50165	0.60965	0.58782	0.17948
STD 6	11/23/00	0:16												
STD 7	11/23/00	0:20												
STD 8	11/23/00	0:25												
STD 5	11/23/00	0:30	1506.507	25219.59	5172.897		1482.625	511.9009	25843.48	1561.292	1546.928	1518.015	1467.111	10369.64
STD 8	11/23/00	0:37	-2.28756	-3.858	-4.60998		-0.47369	-0.05765	37.19937	0.06513	-1.28718	-2.19299	-2.87131	-80.1104
ICV	11/23/00	0:44	1991.866	1936.853	2033.35		1965.619	1994.382	2070.64	2068.794	2046.121	2005.272	1932.329	2033.36
ICV1	11/23/00	0:51	-3.5138	-21.7232	-6.38717		-0.52751	0.37858	20.82641	-0.07292	-1.9187	-1.73039	-2.17147	-87.4472
ICB	11/23/00	0:58	-4.20546	-28.059	-4.71226		-0.59396	0.28631	-3.95247	-0.30618	-2.68423	-1.30206	-1.89229	-47.4658
CCV	11/23/00	1:05	596.9187	24969.28	2020.641		595.568	205.1714	26102.98	623.2217	625.3467	622.1675	587.7965	10211.06
CCV1	11/23/00	1:12	-2.37856	-16.7291	-7.98065		-1.08669	-0.36778	12.67938	-0.16281	-1.50589	-0.06551	0.66358	-109.323
CCB	11/23/00	1:19	-7.53879	-39.3212	-9.05483		-0.89801	0.00435	-4.56652	-1.28014	-4.54874	-5.00888	-5.96528	-74.7516
CRI	11/23/00	1:26	15.38792	-26.6023	17.12333		397.171	9.69435	-3.45956	9.7914	98.75715	15.4461	43.85923	-168.751
ICSA	11/23/00	1:33	-6.81118	100326.7	-7.25444		0.00859	-0.22618	101182	-1.75389	-3.66628	-5.605	-7.4563	40418.85
ICSAB	11/23/00	1:40	601.2147	98164.18	1989.441		595.5129	200.6501	99675.73	587.9553	587.587	589.6505	578.5853	39754.5
OKOP357011 MS	11/23/00	1:47	2242.309	2484.664	2244.231		10678.69	2190.402	105195.8	2185.251	2203.517	2203.505	2223.406	57901.56
OKOP370002	11/23/00	1:55	-4.01336	54.45121	-9.90232		24.99497	-0.0869	3235.232	-0.58988	-3.36209	2.647	0.23178	128.9368
OKOP370003 MS	11/23/00	2:04	2088.724	1987.808	2090.303		9942.916	2040.158	5176.106	2043.96	2068.702	2085.138	2087.316	2223.354
OKOP367002	11/23/00	2:12	-5.24518	583.1125	-9.17151		918.7277	0.75394	303568.1	23.33341	58.08466	1.7936	210.6756	145.0386
OKOP367003 MS	11/23/00	2:20	2027.248	2439.785	1999.849		10466.61	1993.515	297194.7	1987.949	2030.642	1995.646	2220.34	2185.885
OKOP367005	11/23/00	2:29	-3.55184	784.9219	-3.83375		945.4744	0.67896	323260.9	22.85174	59.38721	3.39995	194.8637	245.791
OKOP367007	11/23/00	2:37	-4.30522	6220.956	-10.9496		13.06335	-0.12772	1977.331	0.16109	33.19257	-2.09793	53.68013	29.71236
OKOP367008	11/23/00	2:46	2087.454	8110.067	2024.436		10135.58	2014.738	3869.953	2001.037	2067.462	2015.756	2139.78	2074.263
OKOP403002	11/23/00	2:54	-4.60323	6.22481	-12.9312		5993.25	0.04962	454734.3	3.4271	-6.20451	8.80502	8.4332	-30.6052
OKOP403003 MS	11/23/00	3:02	2172.98	2018.695	2137.239		15179.79	2030.734	415757.5	1993.906	2025.715	1997.841	2102.012	1985.533
CCV	11/23/00	3:11	601.8583	24768.08	2060.572		603.409	208.7987	26335.88	631.2158	637.3842	613.8685	581.1458	10311.13
CCV1	11/23/00	3:19	-2.08984	-21.3077	-2.93493		0.4282	-0.05596	22.56852	-0.35842	-1.59518	-2.02293	-1.33335	-33.4724
CCB	11/23/00	3:28	0.50429	-6.14257	-1.61585		0.85718	-0.07365	16.76351	0.35351	-0.07295	1.48528	0.62905	50.06812
OKOP403005	11/23/00	3:36	-3.86242	-10.1373	-7.49516		13975.57	-0.01225	398431.4	1.40993	-9.57919	12.83927	13.00159	-37.0606
OKOP403007	11/23/00	3:44	-4.42224	-28.7052	-14.0038		1245.095	0.01246	684152.5	0.46876	286.8755	-2.32807	20.96024	22540.24
CRI	11/23/00	3:53	11.23368	-51.6939	11.52716		397.6619	10.12613	29.76735	8.83249	96.43441	13.60521	42.02877	-101.348
ICSA	11/23/00	4:01	-3.65419	96738.2	-9.88236		-0.05164	0.13553	99481.79	-1.18725	-2.02049	-4.21648	-6.57001	39687.23
ICSAB	11/23/00	4:10	594.1635	96442.81	2006.521		588.1742	201.8881	99602.85	594.3815	592.0185	585.2755	572.7766	39435.91
CCV	11/23/00	4:18	609.4025	24816.24	2096.504		612.0989	211.1922	26306.25	635.0001	642.7336	613.9282	592.0464	10347.43
CCV1	11/23/00	4:26	-4.38072	-20.8085	-3.81091		-0.70425	0.43088	15.74475	-0.29212	-2.41279	-3.39021	-3.7098	-53.4718
CCB	11/23/00	4:35	-14.3937	-81.7197	-17.6736		-1.5522	0.19277	-4.05145	-2.67411	-9.77888	-8.56619	-8.91164	-123.905
OKOP353003 QC	11/23/00	4:43	-5.36272	20.1094	-7.48764		15.41763	0.42097	2279.043	-0.63411	-1.27274	22.67115	28.61133	1089.05
OKOP353003 L	11/23/00	4:52	-20.8031	-117.9	-34.0665		7.65868	0.08235	2265.943	-4.6399	-11.5846	10.82294	12.39668	523.3973

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
BLANK	11/22/00	23:48	0.79648	0.00158	0.00036	0.00073	0.11544	0.00221		0.00192				-0.0003
STD 3	11/22/00	23:55		0.29457	0.10726	0.16077	2.4594	0.19667		0.27257				0.15323
STD 4	11/23/00	0:02		0.60672	0.21829	0.32638	4.85789	0.39902		0.54906				0.31307
STD 5	11/23/00	0:09		1.24341	0.44117	0.66103	9.62298	0.80749		1.11038				0.63857
STD 6	11/23/00	0:16	1.42273											
STD 7	11/23/00	0:20	2.21631											
STD 8	11/23/00	0:25	3.55841											
STD 5	11/23/00	0:30	88430.56	26251.74	1016.529	3077.208	10183.07	1544.651	5154.224	10139.79	2539.041			5154.927
STD 8	11/23/00	0:37	10287.03	-7.28025	-0.21556	0.97514	36534.8	-1.682	1.81459	-5.84967	-1.29691			-3.36972
ICV	11/23/00	0:44	19598.98	2057.05	2020.325	2025.104	2024.393	2054.688	2044.006	1987.559	2003.327			2023.366
ICV1	11/23/00	0:51	41.94488	-20.6452	0.0671	-0.66559	9935.609	-2.82061	-0.18293	-12.014	3.28797			-4.00342
ICB	11/23/00	0:58	26.60437	-23.4692	-0.4397	-1.48655	3.44096	-3.42929	-0.60636	-12.3251	2.9155			14.96634
CCV	11/23/00	1:05	39401.1	26402.19	402.243	3039.391	19784.54	614.7863	2097.253	10012.31	1010.521			2037.981
CCV1	11/23/00	1:12	5267.266	-9.49238	-0.28743	1.45622	10.09341	-3.35752	0.81132	-3.37418	-1.92697			-13.4128
CCB	11/23/00	1:19	185.4889	-40.6585	-0.95548	-2.00168	-2.32158	-5.75497	-1.11114	-21.1388	-1.39286			-6.6437
CRI	11/23/00	1:26	-121.456	-24.0931	29.10442	-2.36067	-19.585	79.49354	5.42086	110.8688	10.31548			3.84733
ICSA	11/23/00	1:33	336.4939	104650.4	0.48574	-3.29083	17.43783	-4.26821	5.40045	-19.8474	1.03403			-1.87903
ICSAB	11/23/00	1:40	38268.68	103563.5	392.7153	601.1331	9749.764	583.077	1948.825	988.525	964.6839			1969.373
OKOP357011 MS	11/23/00	1:47	2967.213	4590.686	2755.807	2263.217	255725.4	2194.623	2298.971	2174.856	2106.104			2165.047
OKOP370002	11/23/00	1:55	197733.1	611.5582	11.67458	0.90316	254776.3	7.51794	5.94684	-13.0568	9.74702			-4.26465
OKOP370003 MS	11/23/00	2:04	193785.8	2614.282	2078.353	2111.038	268729.4	2056.959	2036.625	2038.758	1959.073			2047.955
OKOP367002	11/23/00	2:12	6137.638	11562	3199.459	-1.45812	256584.9	59.07007	64776.23	-13.3349	6.0978			-4.87441
OKOP367003 MS	11/23/00	2:20	6016.684	13201.05	5045.112	2039.681	271925.1	2019.093	64096.37	1979.646	1885.75			1952.861
OKOP367005	11/23/00	2:29	5859.783	12313.6	3827.811	-1.46354	226797.5	67.14739	86900.66	-10.9516	7.74613			-9.27599
OKOP367007	11/23/00	2:37	406.8964	293.3728	79.40227	-2.56737	247943.4	213.0368	164.2769	-15.3948	2.90229			-7.81298
OKOP367008	11/23/00	2:46	236.4996	2274.71	2108.607	2084.485	250324.7	2220.557	2119.698	2016.182	1889.601			2013.167
OKOP403002	11/23/00	2:54	6713.276	13668.94	1318.689	-1.42483	254977.3	30.44491	9.14857	99.34072	13.11808			-7.62023
OKOP403003 MS	11/23/00	3:02	5837.921	14600.01	3223.481	2111.196	221103.5	2006.943	2004.341	2220.8	2060.398			1994.377
CCV	11/23/00	3:11	38957.55	26757.1	404.8834	3112.327	19422.53	617.6892	2059.285	10169.04	996.9256			2076.826
CCV1	11/23/00	3:19	5541.882	-9.40748	-0.2943	0.62836	87.83893	-3.01274	-0.50444	-9.81178	1.65103			3.33349
CCB	11/23/00	3:28	359.0987	4.36836	-0.01137	-0.25814	55.18743	-0.31279	0.39988	-1.71076	3.47073			11.00726
OKOP403005	11/23/00	3:36	5131.33	12551.77	182.0272	-2.47887	234456.9	25.1602	8.42191	90.85716	6.56301			-7.68969
OKOP403007	11/23/00	3:44	7007.569	8621.934	2356.245	7.50835	254122.9	77.2891	3.64805	-12.2387	9.1687			-8.80735
CRI	11/23/00	3:53	-17.5941	-46.4234	28.41049	-4.30669	106.6265	74.99411	5.73803	95.51803	12.94938			12.40557
ICSA	11/23/00	4:01	-53.7872	104073.6	0.62289	-3.38405	71.16702	-2.04217	4.2126	-13.5612	0.27358			-0.473
ICSAB	11/23/00	4:10	37520.76	105073.7	388.3181	601.9858	9505.377	581.1101	1961.299	982.2114	968.3129			1973.683
CCV	11/23/00	4:18	38104.11	26906.84	408.2463	3139.477	18859.25	619.8837	2070.24	10318.14	1016.516			2087.928
CCV1	11/23/00	4:26	5074.67	-18.2711	-0.57996	0.27605	17.99089	-4.27652	0.1381	-12.237	-1.2861			4.31539
CCB	11/23/00	4:35	173.1842	-81.0238	-1.7514	-7.02361	7.90733	-11.7555	1.64051	-41.0471	-3.57727			-11.6454
OKOP353003 QC	11/23/00	4:43	5826.375	556.2871	41.25802	-0.78742	54135.5	156.077	17.62328	-18.1486	5.08535			-2.63308
OKOP353003 L	11/23/00	4:52	5410.409	474.6288	36.63095	-13.0796	1195647	140.7121	12.15431	-82.3119	0.83024			-56.4595



Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y	2203/1	2203/2	1960/1	1960/2
BLANK	11/22/00	23:48	0.00031	0.00053	0.00177	72716.5	0.00606	-0.00046	-0.00039	-0.0001
STD 3	11/22/00	23:55	0.02952	0.0645		70207	1.23438	0.32084	0.10403	0.08791
STD 4	11/23/00	0:02	0.06021	0.13176		66831	2.5954	0.66132	0.21809	0.18154
STD 5	11/23/00	0:09	0.12185	0.26876		71543.5	5.12155	1.31019	0.43569	0.35662
STD 6	11/23/00	0:16			0.51681	73140.5				
STD 7	11/23/00	0:20			1.08935	70269.5				
STD 8	11/23/00	0:25			2.17037	77014.5				
STD 5	11/23/00	0:30	1528.455	1585.309	5.59936	72970.5	5188.445	5137.143	2567.564	2524.801
STD 8	11/23/00	0:37	-4.63968	-0.71157	10050.14	71867	15.94178	-5.23861	9.26371	-6.56947
ICV	11/23/00	0:44	2018.457	2099.408	-2.45939	71137	2053.905	2039.063	2031.469	1989.277
ICV1	11/23/00	0:51	-4.97463	-0.75821	1992.922	70411.5	7.46402	-4.0009	17.68868	-3.90175
ICB	11/23/00	0:58	-3.45812	-0.77232	-3.53015	71061	-9.72397	3.94539	-5.46105	7.09733
CCV	11/23/00	1:05	598.2965	635.3395	-0.06951	59747.5	2123.43	2084.185	1023.977	1003.802
CCV1	11/23/00	1:12	-6.69618	-1.6274	4826.047	62780	29.62911	-13.5762	23.78458	-14.7637
CCB	11/23/00	1:19	-4.76769	-1.88952	-6.6065	70676	10.47545	-6.89598	14.27144	-9.21344
CRI	11/23/00	1:26	90.33796	37.20244	588.1646	71065.5	25.36965	-4.53878	27.80886	1.58173
ICSA	11/23/00	1:33	-3.69564	-2.87885	-6.0528	61598.5	3.09604	6.55069	3.7281	-0.31117
ICSAB	11/23/00	1:40	590.4689	587.071	940.1333	62545.5	1984.201	1931.163	981.9819	956.0476
OKOP357011 MS	11/23/00	1:47	2243.738	3076.026	2139.661	65969.5	2340.104	2278.435	2158.971	2079.709
OKOP370002	11/23/00	1:55	-2.60447	32.26827	2.50533	65079	2.36573	7.73448	-1.18404	15.20417
OKOP370003 MS	11/23/00	2:04	2082.761	2140.137	2039.725	63087.5	2072.217	2018.855	2000.822	1938.23
OKOP367002	11/23/00	2:12	-5.12272	7208.791	1.08076	65924.5	64960.51	64684.22	10.90886	3.6957
OKOP367003 MS	11/23/00	2:20	2025.012	8899.045	1922.974	62747.5	66579.55	62856.64	1957.468	1849.945
OKOP367005	11/23/00	2:29	-3.86513	8118.395	2.6504	70648	89966.77	85369.91	17.03766	3.10716
OKOP367007	11/23/00	2:37	-3.1976	706.9861	-0.55221	67191	163.3722	164.7284	-2.33591	5.51728
OKOP367008	11/23/00	2:46	2066.498	2651.471	1964.448	64334.5	2122.243	2118.427	1900.572	1884.124
OKOP403002	11/23/00	2:54	-2.61458	62.13848	3.99171	62225.5	3.91359	11.76191	18.5215	10.42024
OKOP403003 MS	11/23/00	3:02	2091.638	2055.269	1999.33	69145	2026.169	1993.443	2073.319	2053.947
CCV	11/23/00	3:11	603.2642	646.3984	4.43305	65895	2080.419	2048.733	1012.692	989.0541
CCV1	11/23/00	3:19	-2.26835	1.88771	4984.941	61463	3.92578	-2.71648	7.51844	-1.27846
CCB	11/23/00	3:28	2.28551	18.17928	-0.30168	65019.5	8.79759	-3.7929	16.46237	-3.01552
OKOP403005	11/23/00	3:36	-3.03122	42.0259	1.76292	68372.5	7.14742	9.05798	13.39639	3.15126
OKOP403007	11/23/00	3:44	-5.27644	1744.866	4.38295	63857.5	3.01633	3.96322	22.84906	2.33859
CRI	11/23/00	3:53	94.16699	38.50391	577.5094	69151	2.55831	7.32528	15.08651	11.88224
ICSA	11/23/00	4:01	-3.99811	-3.05395	-6.46152	69419	9.55587	1.54472	6.32194	-2.74623
ICSAB	11/23/00	4:10	586.8557	595.7283	950.2792	70351.5	1979.974	1951.976	985.5582	959.7029
CCV	11/23/00	4:18	605.0913	646.5277	1.42985	73378.5	2076.359	2067.185	1027.189	1011.187
CCV1	11/23/00	4:26	-4.05726	1.80577	5029.368	70483	7.48744	-3.53126	4.39046	-4.1203
CCB	11/23/00	4:35	-7.55916	-1.2426	-14.2114	67877.5	20.2437	-7.64735	11.84425	-11.2767
OKOP353003 QC	11/23/00	4:43	-0.68307	59.05606	8.32054	55315	10.80898	21.02511	0.68428	7.28238
OKOP353003 L	11/23/00	4:52	-34.9684	53.55991	-12.6884	65065	49.78452	-6.63372	38.53972	-17.9971

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
OKOP353003 AS	11/23/00	5:00	143.4749	2106.512	2355.035		2028.85	2012.606	3968.214	2132.49	2165.582	2201.562	2333.063	3019.834
OKOP353003 MS	11/23/00	5:08	2403.533	2061.492	2261.899		1336.528	1943.31	4191.364	2028.744	2081.945	2147.577	2295.685	3115.839
OKOP353004	11/23/00	5:17	-6.28058	244.6957	-14.758		18.9912	0.42418	2758.108	-0.91078	-1.62898	38.09703	55.35459	1589.579
CRI	11/23/00	5:33	14.51696	-45.6779	12.86787		404.9305	9.89683	-1.77905	8.97551	96.28907	15.74437	46.55487	-77.9479
ICSA	11/23/00	5:41	-5.34674	98482.21	-6.92406		4.3534	-0.01561	99577.06	-1.40259	-2.60064	-4.947	-6.92316	39476.81
ICSAB	11/23/00	5:50	601.0971	97310.57	1965.157		599.8723	199.0925	97649.3	579.8462	580.059	572.095	583.8613	38797.27
CCV	11/23/00	5:58	617.1607	25072.25	2076.643		622.5547	209.4133	25952.59	621.5596	633.0552	621.144	615.5747	10195.39
CCV1	11/23/00	6:06	-0.76398	-20.3462	-4.46372		3.31535	0.04779	14.98142	-0.30291	-0.55492	-1.43662	-1.1101	-64.7011
CCB	11/23/00	6:15	-5.6115	-28.6056	-4.83698		2.62893	-0.05639	0.46779	-0.77622	-3.57517	-4.30709	-3.40013	-69.4344
PB M1 11/15 XX	11/23/00	6:23	-6.74973	-38.9284	-7.7284		3.41666	0.09954	7.63978	-1.19989	-4.06544	-14.7914	-14.9577	52.01773
LCS	11/23/00	6:32	2015.52	1941.487	2063.364		2037.549	2038.347	2080.82	2093.456	2073.668	2036.693	1983.648	2014.146
OKOP408001	11/23/00	6:40	-5.04573	659.0451	-3.28243		42.32437	0.70215	12611.28	-0.18777	-2.02778	-2.38559	-0.04608	2498.792
OKOP408002	11/23/00	6:48	-4.83569	-14.4534	-6.05941		36.78843	0.33675	12450.39	-0.76282	-2.61064	-3.71145	-0.80979	193.6537
OKOP408003	11/23/00	6:57	-5.32048	2296.81	14.01356		112.665	0.76207	11569.68	-0.36904	3.81568	101.9974	61.94236	10015.79
OKOP408004 QC	11/23/00	7:05	-4.77599	0.55177	16.72456		31.10762	0.13719	9711.028	-0.56625	-3.1057	93.62176	22.33681	91.23253
OKOP408004 L	11/23/00	7:14	-23.8257	-127.14	-18.1317		29.48729	1.4394	9295.059	-4.17236	-14.8113	68.32725	1.1132	-178.214
OKOP408004 MD	11/23/00	7:22	-4.69461	8.89136	17.55766		29.11234	0.24619	9395.988	-0.63257	-2.35291	88.38655	21.37546	76.85501
OKOP408004 MS	11/23/00	7:30	2021.593	1965.583	2201.844		2053.338	2164.608	11669.92	2214.336	2206.688	2240.384	2096.675	2255.135
OKOP408004 MSD	11/23/00	7:39	1990.56	1924.791	2096.425		2032.814	2057.485	11229.48	2092.126	2097.964	2136.229	2002.556	2161.611
CCV	11/23/00	7:47	589.472	24163.23	2034.637		594.7551	205.6348	25679.87	619.985	623.0326	598.7497	575.1064	10045.3
CCV1	11/23/00	7:55	-4.99038	-33.0152	-3.55409		-0.04897	0.34355	7.69895	-0.48745	-2.65107	-5.06656	-5.06109	-32.7897
CCB	11/23/00	8:04	-5.70015	-42.154	-9.17846		-1.66247	0.05425	-2.41108	-0.87081	-3.58261	-3.9635	-4.71568	-152.159
OKOP392001	11/23/00	8:12	-4.92032	187.6072	-7.36142		42.25507	0.06729	42033.98	-0.57899	-3.07809	-3.89395	78.74423	-34.4408
OKOP392002	11/23/00	8:21	-3.36579	176.5066	-7.26665		43.08776	0.24774	42931.37	-0.27097	-1.95899	-3.43041	0.18177	32.47101
OKOP392003	11/23/00	8:29	-5.08174	202.5669	-10.9656		41.36813	0.24847	43095.8	-0.65095	-2.4256	-4.14836	2.7215	-42.233
OKOP392004	11/23/00	8:38	-4.75669	177.3398	-5.2233		41.80464	0.29056	43619.47	-0.59569	-2.69929	-4.42357	-2.0112	-6.75007
OKOP392005	11/23/00	8:46	-3.66163	170.7547	-7.00009		42.31873	0.25941	42853.63	-0.43766	-1.90631	-2.88454	63.17047	-43.9622
OKOP392006	11/23/00	8:54	-5.05082	245.5682	-7.63478		41.8568	0.31813	43879.64	-0.82262	-2.64517	-4.28226	5.13542	-13.9213
OKOP392007	11/23/00	9:03	-5.01525	183.6215	-7.3233		41.74024	0.22983	43667.8	-0.88784	-2.95767	-3.81646	70.24214	-14.4526
OKOP392008	11/23/00	9:11	-5.18388	5.2934	-6.52056		43.66286	0.30047	39605.88	-0.83089	-2.68386	-3.91914	207.3091	-57.9895
OKOP392009	11/23/00	9:19	-5.44126	189.0046	-7.89674		45.29	0.21184	45203.43	-0.9014	-3.161	-4.59254	29.71488	-48.8563
OKOP392011	11/23/00	9:28	-5.17695	222.1221	-8.03289		41.96057	-0.21547	41591.27	-0.69584	-2.67031	-4.54361	0.098	-31.9908
CCV	11/23/00	9:36	602.6628	24328.75	2010.583		606.2676	202.2999	25110.87	598.8963	607.7592	600.7665	597.8002	9856.197
CCV1	11/23/00	9:45	-2.45054	-27.8118	-5.58031		0.1495	-0.12749	10.62114	-0.51479	-2.34252	-2.87972	-2.898	0.25688
CCB	11/23/00	9:53	-8.09319	-44.7847	-13.954		-1.01925	-0.06262	62.40891	0.35511	-5.12366	-5.07327	-3.24517	-79.5321
OKOP392012	11/23/00	10:01	-5.23478	230.4305	-7.81432		42.37316	-0.11945	42374.49	-0.97662	-2.68095	-4.60888	-3.16865	-36.6684
OKOP392014	11/23/00	10:10	-5.04024	243.1398	-6.96133		41.33382	0.02815	42427.59	-0.72238	-2.7543	-4.52616	-3.29665	-20.2393
OKOP392015	11/23/00	10:18	-5.92293	188.303	-9.21191		41.69142	0.07777	43356.02	-0.77595	-2.91906	-4.08732	21.68278	-65.5285
OKOP392016	11/23/00	10:27	-5.20775	220.7364	-11.3599		42.51425	0.06198	42803.19	-0.78115	-3.31156	-4.29105	13.33029	-41.31
OKOP392018	11/23/00	10:35	-5.10332	137.6068	-7.95792		42.43401	0.02241	43078.05	-0.6571	-2.76485	-4.92931	0.94341	-25.3039
OKOP392019	11/23/00	10:43	-10.0584	184.1788	-11.9947		42.56522	-0.04435	42690.98	-1.70017	-5.41165	-7.34896	16.32298	22.07851



Sample_Name	Date	Time	Potassium	agnesi	anganes	olybcdenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
OKOP353003 AS	11/23/00	5:00	39826.19	2542.767	2225.293	2261.708	73222.5	2240.707	2106.175	2261.332	2345.807			2119.083
OKOP353003 MS	11/23/00	5:08	5558.575	2537.748	2155.955	2192.591	63405.76	2170.502	1520.558	2215.517	2303.212			2031.197
OKOP353004	11/23/00	5:17	11806.23	1730.913	72.28756	-0.09385	28320.18	221.5487	6.86133	-19.7554	9.24755			-10.6807
CRI	11/23/00	5:33	-247.366	-33.252	28.168	-3.41826	172.919	76.06825	7.04675	107.0999	6.88639			13.11058
ICSA	11/23/00	5:41	132.0604	104990.3	0.5341	-3.2885	163.0577	-3.6387	4.52013	-17.7019	3.49133			1.45221
ICSAB	11/23/00	5:50	37820.44	102709.8	385.4257	596.9277	9366.428	570.0548	1925.824	984.548	966.0653			1947.007
CCV	11/23/00	5:58	38566.2	26626.21	402.9542	3128.84	18923.31	609.9202	2021.692	10363.69	1002.135			2073.364
CCV1	11/23/00	6:06	5004.316	3.68415	-0.21464	-0.30645	70.59516	-2.2321	-0.78662	-3.43133	-4.31716			1.36769
CCB	11/23/00	6:15	148.6648	-34.4562	-0.71387	-2.99092	59.10097	-2.81612	-0.5529	-16.5584	3.03824			-1.06554
PB M1 11/15 XX	11/23/00	6:23	260.6096	-40.8055	-0.74856	-3.82729	138.3461	-4.0859	-1.57583	-22.8659	7.38343			9.91539
LCS	11/23/00	6:32	19484.97	2103.758	2007.165	2079.467	2142.174	2058.77	2074.031	2019.457	1999.763			2045.832
OKOP408001	11/23/00	6:40	11830.37	3362.503	201.8945	-0.81708	10978.03	-2.53642	-0.43671	-12.8712	4.23585			-6.32356
OKOP408002	11/23/00	6:48	10970.9	3268.078	161.1426	-2.65364	11027.98	-2.77849	-1.71885	-16.3793	2.84687			-4.73925
OKOP408003	11/23/00	6:57	10106.49	2715.708	1672.822	-2.69841	4637.502	6.87072	5.05492	-20.2189	2.88286			-7.88314
OKOP408004 QC	11/23/00	7:05	9370.919	2043.406	245.8179	-1.85487	4662.451	-3.56804	0.61475	-14.4358	3.76054			-3.19729
OKOP408004 L	11/23/00	7:14	9470.06	1788.257	230.9503	-12.0562	4517.446	-17.9747	7.50978	-81.931	12.49878			-9.92908
OKOP408004 MD	11/23/00	7:22	8835.58	1954.021	235.4753	-1.14398	4438.934	-2.56881	-0.2128	-15.3779	-0.98683			-5.92471
OKOP408004 MS	11/23/00	7:30	27670.48	4304.096	2354.21	2170.146	6426.017	2183.216	2163.904	2114.07	2077.402			2146.89
OKOP408004 MSD	11/23/00	7:39	27255.06	4105.17	2240.05	2053.717	6324.895	2073.722	2053.364	2017.929	1975.315			2045.196
CCV	11/23/00	7:47	37704.23	26337.45	396.2294	3071.864	18626.52	601.904	2032.885	10002.62	991.5421			2043.335
CCV1	11/23/00	7:55	5046.396	-27.7747	-0.64753	-0.84526	36.29536	-3.61749	-0.82891	-14.6341	3.91083			5.51889
CCB	11/23/00	8:04	-9.93817	-32.4228	-0.78692	-2.46007	19.51188	-4.46007	-1.62734	-16.8845	4.20743			7.17435
OKOP392001	11/23/00	8:12	2554.62	8441.619	2.39929	-2.78137	23092.74	-0.91125	0.36626	-20.6193	-1.44684			-4.72928
OKOP392002	11/23/00	8:21	2982.474	8642.633	4.54593	-1.97026	23647.06	-1.10182	-1.34616	-12.79	2.79276			-6.81531
OKOP392003	11/23/00	8:29	2865.427	8713.734	2.26913	-2.59016	23781.39	-0.92059	-1.17873	-13.7764	1.02214			-4.17513
OKOP392004	11/23/00	8:38	3033.777	8793.481	2.69141	-3.28619	23969.71	-1.73094	-0.36503	-13.7364	0.99361			-4.54026
OKOP392005	11/23/00	8:46	2737.031	8474.727	1.16607	-1.62983	21473.99	1.83355	1.38462	-14.9163	-0.47417			-4.09942
OKOP392006	11/23/00	8:54	2761.191	8809.501	2.57899	-3.72182	23923.87	-1.74688	0.39994	-17.7392	3.93625			-5.28928
OKOP392007	11/23/00	9:03	3073.771	8733.387	3.83803	-3.53513	23296.41	0.1119	-0.89018	-17.6988	10.72481			-6.12331
OKOP392008	11/23/00	9:11	2279.772	7612.334	0.9661	-3.48472	16947.46	-1.72805	3.99367	-14.9786	0.38548			-3.13073
OKOP392009	11/23/00	9:19	2843.512	9168.813	2.14736	-3.18669	24455	-2.48262	2.93971	-16.755	2.40285			-2.90283
OKOP392011	11/23/00	9:28	2814.162	8252.333	2.90779	-2.38315	23000.44	-1.94605	1.12619	-15.7096	2.97539			-4.99724
CCV	11/23/00	9:36	37464.72	25514.15	393.7725	3018.293	18722.17	591.1809	1958.254	10046.35	975.8811			1996.31
CCV1	11/23/00	9:45	5001.91	-11.0724	-0.45539	-0.53047	21.90987	-3.65247	-0.59742	-10.0719	-0.47734			3.54783
CCB	11/23/00	9:53	628.4744	-40.4256	-0.83017	-3.86975	317.1926	-6.16159	-2.48195	-27.0606	3.88374			-4.8834
OKOP392012	11/23/00	10:01	2831.681	8348.843	2.83875	-3.28883	24060.13	-2.88899	-0.78184	-17.2759	5.19562			-2.08015
OKOP392014	11/23/00	10:10	2597.476	8605.17	2.30823	-2.27292	24418.71	-1.12513	-0.80454	-14.7805	5.24959			-1.51393
OKOP392015	11/23/00	10:18	2623.613	8704.893	1.75043	-3.56066	23315.82	-2.35011	0.68034	-19.4426	4.507			-4.06741
OKOP392016	11/23/00	10:27	2648.984	8516.475	1.9145	-3.43289	23275.89	-2.12969	-0.03381	-15.8634	2.05918			-2.05804
OKOP392018	11/23/00	10:35	2647.472	8559.939	2.1624	-2.41792	22985.47	-1.7314	-1.31084	-16.9588	1.23447			-5.12008
OKOP392019	11/23/00	10:43	2525.156	8464.744	3.41152	-4.76968	23712.01	-5.32406	-0.73126	-26.8957	3.12505			-1.68962

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Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
OK0P353003 AS	11/23/00	5:00	2186.464	2262.382	2186.722	58989	2225.953	2046.376	2460.85	2288.372
OK0P353003 MS	11/23/00	5:08	2125.897	2154.008	2093.259	53007.5	1600.261	1480.766	2379.193	2265.278
OK0P353004	11/23/00	5:17	5.48604	60.10256	8.11595	55689.5	11.30232	4.64384	11.02287	8.36101
CRI	11/23/00	5:33	94.00922	37.6405	572.2594	70415.5	9.46455	5.83948	12.86216	3.90282
ICSA	11/23/00	5:41	-4.00775	-3.07165	-5.26271	63700	3.25127	5.15338	-3.09074	6.77725
ICSAB	11/23/00	5:50	583.3148	576.2162	923.2198	62850.5	1948.658	1914.423	982.7685	957.7261
CCV	11/23/00	5:58	604.957	637.4592	1.39884	65783	2061.224	2001.956	1027.797	989.3232
CCV1	11/23/00	6:06	-3.67065	0.84332	4861.471	65284.5	-0.67776	-0.84119	-4.75042	-4.10103
CCB	11/23/00	6:15	-3.60498	0.11495	-4.47782	65140	-8.46098	3.39499	-2.04551	5.57613
PB M1 11/15 XX	11/23/00	6:23	2.01981	4.2177	-9.66865	63652.5	-68.299	31.73548	-46.6724	34.37064
LCS	11/23/00	6:32	2023.563	2118.84	2009.264	65387	2099.795	2061.167	2050.176	1974.594
OK0P408001	11/23/00	6:40	-1.67482	94.44628	-3.54404	67163.5	-0.64504	-0.33293	6.28332	3.21347
OK0P408002	11/23/00	6:48	-3.57134	61.58981	-6.50692	65155.5	-7.53197	1.18311	-4.83298	6.68086
OK0P408003	11/23/00	6:57	3.57611	203.135	-6.60355	63076	1.92476	6.61742	8.57216	0.04229
OK0P408004 QC	11/23/00	7:05	-2.95629	64.03569	-4.96214	62822.5	-9.37532	5.60207	-8.77178	10.01712
OK0P408004 L	11/23/00	7:14	-19.7615	60.94694	-30.7522	71092	-29.2693	25.8707	24.11032	6.70087
OK0P408004 MD	11/23/00	7:22	-3.28431	51.76136	-4.07891	65552	-8.80009	4.07416	-3.28253	0.1591
OK0P408004 MS	11/23/00	7:30	2132.084	2330.491	2065.676	68508.5	2169.776	2160.972	2111.453	2060.402
OK0P408004 MSD	11/23/00	7:39	2036.051	2201.409	2019.785	68284.5	2056.584	2051.756	2012.436	1956.782
CCV	11/23/00	7:47	590.963	636.5377	1.43671	68278.5	2027.945	2035.351	1001.226	986.7075
CCV1	11/23/00	7:55	-1.91582	0.42284	4955.533	68573	-18.0616	7.77429	-8.20125	9.95762
CCB	11/23/00	8:04	-9.38902	-3.84974	-6.48469	69480	-21.8269	8.4571	-7.94861	10.27618
OK0P392001	11/23/00	8:12	-4.04224	195.2333	-3.63003	67861.5	2.72908	-0.81359	4.00444	-4.16858
OK0P392002	11/23/00	8:21	-3.65657	139.7471	0.38724	63016	-1.61749	-1.21094	3.52821	2.42539
OK0P392003	11/23/00	8:29	-3.67097	228.7215	-1.78466	65876	-4.97093	0.71429	6.1128	-1.51955
OK0P392004	11/23/00	8:38	-3.66171	194.895	-2.15226	64176	-5.05493	1.97616	3.25802	-0.13707
OK0P392005	11/23/00	8:46	-3.50012	223.4605	-0.75192	69488	-3.51661	3.83135	2.44379	-1.93114
OK0P392006	11/23/00	8:54	-3.12603	42.39846	-1.53045	68346	-5.28975	3.2403	6.31471	2.74863
OK0P392007	11/23/00	9:03	-3.75926	71.41114	-2.91713	64947.5	-6.76767	2.0439	15.56373	8.3088
OK0P392008	11/23/00	9:11	-4.12983	243.4721	-2.74271	70832	-2.77242	7.37143	-0.15503	0.65517
OK0P392009	11/23/00	9:19	-3.86191	118.4656	-0.77516	69375.5	-3.07947	5.94458	7.03799	0.08858
OK0P392011	11/23/00	9:28	-3.09385	1.00212	-4.09176	58625	-0.51451	1.94509	6.84224	1.04465
CCV	11/23/00	9:36	585.8507	600.838	2.80892	61773	1978.592	1948.101	993.5974	967.0361
CCV1	11/23/00	9:45	-0.91011	1.66455	4836.356	63254	3.746	-2.76609	7.59089	-4.50561
CCB	11/23/00	9:53	-5.39168	13.01658	-8.75443	63076.5	-28.2732	10.39408	-15.0983	13.36035
OK0P392012	11/23/00	10:01	-3.63971	4.0916	-0.46688	60352.5	-8.37518	3.00889	3.69417	5.94501
OK0P392014	11/23/00	10:10	-3.18802	32.34739	-2.5694	65804	-6.7663	2.17163	7.99181	3.88036
OK0P392015	11/23/00	10:18	-3.57961	35.60487	-2.21823	67562.5	-4.95606	3.4941	3.68931	4.91506
OK0P392016	11/23/00	10:27	-3.17851	25.30439	-3.44595	65599.5	-3.59934	1.74605	6.75838	-0.28708
OK0P392018	11/23/00	10:35	-2.92934	378.3433	-2.99447	67852.5	-7.37819	1.71805	4.24024	-0.26633
OK0P392019	11/23/00	10:43	-4.61551	105.5123	-5.16398	66371.5	-17.9296	7.85477	1.50211	3.93512

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
OKOP392020	11/23/00	10:52	-6.01529	207.9906	-9.13541		41.7984	-0.14454	43947.77	-0.95058	-3.0309	-4.82772	-2.76334	-51.3642
OKOP392022	11/23/00	11:00	-4.811	179.2306	-7.40747		42.29374	-0.03304	41817.41	-0.59846	-2.87525	-4.26877	23.65502	-33.5289
OKOP392023	11/23/00	11:09	-5.48991	88.64616	-7.87852		40.13384	0.05734	42959.21	-0.56695	-2.68985	-4.19887	409.4854	46.61947
OKOP392024	11/23/00	11:17	-4.74589	131.852	-8.90956		37.60815	-0.0649	38404.98	-0.92196	-2.76161	-3.73857	142.9203	-72.0938
CRJ1	11/23/00	11:25	8.12931	-58.494	1.39152		405.4782	10.08857	-7.92655	8.37889	95.40519	10.6064	39.03195	-49.3119
ICSA1	11/23/00	11:34	-4.41131	104448.6	-6.35535		-0.29938	-0.26179	105481.4	-1.42326	-2.88382	-4.17019	-6.15573	42635.88
ICSAB1	11/23/00	11:42	628.5183	104482.2	2113.793		612.9888	211.2342	106025.3	625.308	611.6437	621.967	602.4912	42602.75
CCV	11/23/00	11:51	610.4033	25485.33	2079.447		603.8207	206.952	26185.94	622.9729	623.6224	618.5884	590.7982	10440.35
CCV1	11/23/00	11:59	-4.8157	-7.07234	-7.64669		-0.47566	-0.21542	65.48753	-0.72013	-2.9016	-4.68782	-4.73707	-60.7584
CCB	11/23/00	12:08	-6.40625	-18.7408	-6.86509		-1.83399	-0.3047	-0.23933	-1.23344	-4.15537	-6.30175	-6.6231	-155.018
OKOP392025	11/23/00	12:16	-4.51497	203.9616	-6.17054		42.86554	-0.22209	43397.97	-0.64598	-2.22879	-3.79497	39.66957	-45.1539
OKOP392026	11/23/00	12:24	-9.95968	233.4518	-9.95266		40.12709	-0.36547	44282.31	-1.71581	-5.38102	-7.24236	0.34863	-33.5397
OKOP392027	11/23/00	12:33	-5.53975	267.3534	-8.7508		41.48458	-0.37615	44142.37	-1.02466	-2.57392	-4.07458	2.40074	-44.342
OKOP392028	11/23/00	12:41	-4.87313	241.4304	-8.27404		42.28806	-0.32306	44367.41	-0.93515	-2.44707	-4.09337	18.55834	-38.7586
OKOP392029	11/23/00	12:50	-5.07083	32.95558	-8.2393		41.02022	-0.29756	41648.33	-0.56934	-2.64652	-3.5978	132.6475	-52.6858
OKOP505001	11/23/00	12:58	-4.98256	-11.579	-13.5213		86.01719	-0.299	90014.67	-0.6277	-3.16684	-3.44157	6.29537	-81.16
OKOP505002	11/23/00	13:06	-4.36309	-8.68635	-13.5438		85.67892	-0.15852	91300.45	-0.65512	-2.65108	-3.64026	5.34312	-73.1434
OKOP505003	11/23/00	13:15	-4.05328	-16.3631	-13.8525		85.1658	-0.3041	88948.69	-0.93544	-2.9006	-4.32326	5.02486	-62.6134
OKOP505004	11/23/00	13:23	-3.82724	-5.69168	-14.8518		85.99234	-0.28655	89173.25	-0.64205	-2.32359	-3.16981	5.48263	-61.2048
OKOP505005	11/23/00	13:32	-7.04565	-24.285	-12.9113		85.10559	-0.28073	88424.55	-1.0058	-4.18295	-5.60018	4.94262	-69.1169
CCV	11/23/00	13:40	610.8215	25807.98	2135.898		600.0448	212.0145	27065.88	648.1559	641.5087	635.3223	593.911	10785.49
CCV1	11/23/00	13:48	-4.31895	-15.8819	-5.40783		-0.78194	-0.25663	7.92532	-0.88784	-2.78533	-3.94756	-5.19721	-76.8074
CCB	11/23/00	13:57	-4.3405	-12.3321	-5.81965		-1.91075	-0.48983	-2.06563	-0.71412	-2.22967	-0.57878	-1.26964	-186.728
OKOP505006	11/23/00	14:05	-5.23218	-15.6679	-11.9746		84.5948	-0.08732	92422.27	-0.93384	-2.92897	-4.39985	8.48324	-78.9831
OKOP505007	11/23/00	14:14	-5.1039	-19.9381	-15.0741		85.66509	-0.19547	90631.78	-0.95435	-2.59605	-4.27586	8.07728	-75.3322
OKOP505008	11/23/00	14:22	-6.02282	-15.5103	-16.4151		85.33154	-0.17233	90490.38	-1.17202	-3.65994	-4.31368	7.82517	-72.2291
OKOP505009	11/23/00	14:30	-5.69473	-22.8326	-15.8506		84.80532	-0.1545	90889.81	-1.04792	-3.53005	-4.86233	5.63678	-65.7399
OKOP505010	11/23/00	14:39	-3.87616	-11.3032	-14.5045		84.68916	-0.37507	89929.84	-0.67181	-1.92148	-3.145	8.48672	-80.9173
OKOP505011	11/23/00	14:47	-3.67746	-14.4107	-11.8675		84.32171	-0.21315	88592.5	-0.50349	-2.25801	-3.42861	8.45263	-82.2936
OKOP505012	11/23/00	14:56	-6.2701	-23.6053	-16.3869		85.18664	-0.35989	90818.59	-1.01689	-3.45205	-5.27371	6.66194	-73.9217
OKOP505013	11/23/00	15:04	-5.13643	-22.1495	-13.2494		86.21717	-0.26216	91964.92	-0.76089	-3.75844	-4.22075	9.66068	-72.3803
OKOP505014	11/23/00	15:12	-4.33288	-14.3351	-14.1206		85.22549	-0.10516	91594.76	-0.90325	-2.68235	-4.43269	8.76324	-62.9431
OKOP505015	11/23/00	15:21	-4.83788	-8.58017	-11.9543		85.47955	-0.31917	92336.48	-0.52901	-2.72946	-4.21314	5.30113	-74.9388
CCV	11/23/00	15:29	609.2373	25576.41	2116.162		607.8835	212.3152	26984.94	647.181	643.4648	637.7911	596.5348	10732.04
CCV1	11/23/00	15:38	-6.57235	-23.9906	-8.11233		-0.17154	-0.38277	4.47013	-1.34348	-4.29481	-6.57353	-7.70766	-37.0238
CCB	11/23/00	15:46	6.62499	44.85245	9.65074		0.09661	-0.45533	8.41258	1.43428	4.29771	5.50627	5.52077	6.23635
OKOP505016	11/23/00	15:55	-4.74892	-18.4864	-15.3597		85.156	-0.22472	91113.81	-0.86979	-2.29329	-4.5568	6.17831	-74.6033
OKOP505017	11/23/00	16:03	-3.95019	-13.2867	-13.5534		86.46208	-0.48505	90507.94	-0.42739	-2.53042	-4.13473	7.60997	-71.5259
OKOP505018	11/23/00	16:11	-6.2566	-25.2983	-15.3928		84.88319	-0.39217	90477.39	-1.06398	-3.89495	-5.76091	6.36264	-67.8237
OKOP505019	11/23/00	16:20	-4.30142	-16.3195	-14.2588		88.00186	-0.36309	93114.44	-0.61431	-2.56603	-4.20322	8.11127	-61.9831
OKOP505020	11/23/00	16:28	-5.09938	-21.3147	-13.5162		85.33856	-0.35229	91538	-0.43261	-3.48154	-5.14815	6.31037	75.4767

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
OKOP392020	11/23/00	10:52	3306.691	8688.719	1.96559	-3.5454	23946.73	2.14011	-1.28919	-18.8064	0.33307		-5.98178	
OKOP392022	11/23/00	11:00	2523.563	8055.437	3.85037	-3.32566	21188.56	-2.38885	-1.09091	-14.104	3.02063		-0.18577	
OKOP392023	11/23/00	11:09	2645.442	8403.225	6.05353	-2.09446	21909.08	-1.8371	0.85907	-13.5076	3.25461		-5.61125	
OKOP392024	11/23/00	11:17	2395.08	7396.772	1.88625	-3.019	18310.02	-1.64082	1.88078	-13.8872	2.33142		0.80908	
CRII	11/23/00	11:25	172.4815	-69.002	29.6002	-7.20711	17.8769	75.88906	4.13875	85.57411	11.13744		22.89748	
ICSA1	11/23/00	11:34	-193.685	108064.4	0.85607	-3.03301	34.34393	-3.72844	4.52431	-15.1465	-1.91026		-0.87037	
ICSAB1	11/23/00	11:42	39449.21	108438.1	422.0627	620.183	10113.63	621.6298	2077.622	1037.674	1027.226		2079.32	
CCV	11/23/00	11:51	38090.56	26024.43	416.3587	3044.92	18995.25	624.1791	2053.484	10213.8	1022.431		2058.198	
CCV1	11/23/00	11:59	4947.109	-17.4623	-0.54623	-0.75262	24.46991	-4.47408	0.2371	-13.4037	0.46221		-3.58157	
CCB	11/23/00	12:08	85.25916	-37.0023	-0.89499	-3.9965	4.14468	-5.43604	-0.80938	-19.0863	2.07376		-14.0257	
OKOP392025	11/23/00	12:16	2644.518	8467.162	2.31066	-2.58835	22658.15	-0.45549	1.15199	-16.3412	1.22408		-5.9801	
OKOP392026	11/23/00	12:24	2661.16	8544.598	2.30428	-3.68608	23921.04	-4.86616	-0.95705	-27.4371	3.87294		0.763	
OKOP392027	11/23/00	12:33	2429.927	8521.824	2.73153	-3.22356	23629.21	-1.7715	1.27621	-18.3209	-0.41217		-2.81102	
OKOP392028	11/23/00	12:41	2841.155	8666.104	2.46565	-3.21323	23440.24	6.74766	1.84907	-13.818	6.34074		-1.58813	
OKOP392029	11/23/00	12:50	2650.155	7860.698	6.91314	-3.02043	20472.45	36.14027	0.01346	-17.0304	2.93148		-3.48531	
OKOP505001	11/23/00	12:58	2193.697	9894.564	83.39189	-3.52681	18039.16	-4.00333	0.72108	-13.6152	6.23292		-4.30457	
OKOP505002	11/23/00	13:06	2094.79	10149.97	84.45556	-4.50617	18290.84	-2.36969	2.19155	-14.1243	7.03003		-2.77734	
OKOP505003	11/23/00	13:15	1982.174	9793.457	81.22697	-3.15975	17842.35	-2.38965	1.28595	-15.068	7.16924		-9.77487	
OKOP505004	11/23/00	13:23	1964.822	9817.656	85.07546	-3.07941	17901.66	-1.62302	-0.76785	-12.7821	4.82741		-8.98418	
OKOP505005	11/23/00	13:32	1883.253	9750.992	81.38934	-3.44763	17778.19	-4.45128	0.88306	-19.3923	11.92753		-2.34963	
CCV	11/23/00	13:40	38855.38	26964.59	435.8053	3094.266	19370.78	642.2773	2126.614	10327.84	1053.11		2123.371	
CCV1	11/23/00	13:48	5239.601	-27.4348	0.17442	-1.15962	8.2357	-4.38576	0.35261	-12.4062	2.98784		-6.95641	
CCB	11/23/00	13:57	202.324	-23.1563	-0.13333	-2.69861	-4.599	-2.94725	1.13172	-14.9782	-3.37979		-16.7649	
OKOP505006	11/23/00	14:05	2315.05	10291.76	85.15327	-3.88398	18413.11	-4.77639	-0.47711	-14.6446	8.232		-6.15508	
OKOP505007	11/23/00	14:14	2186.664	9982.041	83.71125	-3.3126	18124.01	-4.61422	1.75712	-18.6315	8.59535		-9.78025	
OKOP505008	11/23/00	14:22	2076.563	9981.67	83.22946	-4.55968	17985.74	-5.06192	-1.0654	-19.5243	6.32994		-2.33589	
OKOP505009	11/23/00	14:30	2189.704	10074.94	83.332	-4.23786	18151.45	-4.40042	1.404	-16.4256	8.9497		-3.41608	
OKOP505010	11/23/00	14:39	1906.411	10000.21	84.75721	-4.05933	18480.47	-3.321	1.21989	-12.6957	8.34874		-5.56854	
OKOP505011	11/23/00	14:47	1876.712	9912.051	80.60752	-3.31652	18212.68	-3.30647	-0.23191	-9.6767	9.26869		-5.67939	
OKOP505012	11/23/00	14:56	2077.21	10093.95	82.84645	-3.65517	18718.81	-4.45818	-1.38182	-18.5919	13.35004		-5.93939	
OKOP505013	11/23/00	15:04	2002.253	10206.25	83.42323	-3.40317	18694.76	-4.62146	-0.26664	-17.7438	8.47829		-4.7618	
OKOP505014	11/23/00	15:12	2037.326	10274.53	82.5907	-3.65262	18482.4	-4.29149	0.39008	-12.6821	6.90212		-3.64217	
OKOP505015	11/23/00	15:21	2247.793	10273.97	83.95114	-4.87218	18758.61	-3.70959	0.2163	-14.9003	3.74647		-6.47872	
CCV	11/23/00	15:29	38237.16	26883.74	438.7156	3088.487	19022.23	644.5651	2133.638	10296.86	1047.314		2113.125	
CCV1	11/23/00	15:38	5135.241	-40.7471	0.34263	-1.73346	7.57054	-6.14509	0.93332	-19.3587	1.6349		2.34317	
CCB	11/23/00	15:46	74.62551	38.92073	1.47943	2.27341	0.248	6.07302	-0.97802	16.5577	-0.7945		3.50713	
OKOP505016	11/23/00	15:55	2074.529	10169.52	83.32785	-2.86449	19018.86	-3.33912	-1.61403	-15.8077	7.33402		-4.22606	
OKOP505017	11/23/00	16:03	2109.896	10006.48	86.61122	-2.94806	18823.6	-3.10592	-0.10986	-15.3012	8.41972		-3.8938	
OKOP505018	11/23/00	16:11	2158.77	10051.94	84.63531	-3.8899	18817.59	-5.04688	-1.40322	-18.1038	5.32453		-4.04037	
OKOP505019	11/23/00	16:20	1988.872	10315.59	89.33813	-3.10999	19343.93	-2.50849	-0.81357	-13.9161	10.7467		-6.10619	
OKOP505020	11/23/00	16:28	2223.379	10253.08	86.1045	-5.21971	19207.89	-2.98922	-1.86419	-16.3977	10.78727		-9.91523	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
OKOP392020	11/23/00	10:52	-4.74736	94.88961	-2.52857	56553.5	-3.27133	-0.29987	10.27122	-4.62876
OKOP392022	11/23/00	11:00	-3.76776	18.1081	-3.53209	68705.5	-3.58874	0.15591	4.59487	2.23452
OKOP392023	11/23/00	11:09	-4.23058	83.48837	-0.53313	67779	0.43643	1.06985	3.37065	3.1965
OKOP392024	11/23/00	11:17	-4.31873	158.0641	-2.28532	68423.5	-2.19602	3.91591	9.63655	-1.31583
CRI1	11/23/00	11:25	102.0493	41.37371	613.8771	67413	-12.2733	12.33227	-1.2206	17.30703
ICSA1	11/23/00	11:34	-4.27612	-1.7557	-5.27363	72701.5	6.87543	3.35026	-1.1361	-2.29692
ICSAB1	11/23/00	11:42	629.8558	627.0361	1020.901	67630	2080.694	2076.088	1039.282	1021.207
CCV	11/23/00	11:51	614.8955	631.3798	-1.10736	68299.5	2052.148	2054.15	1031.069	1018.118
CCV1	11/23/00	11:59	-4.20057	72.79011	5165.846	71764.5	-7.40373	4.05158	-2.17673	1.77954
CCB	11/23/00	12:08	-8.94863	0.22698	-5.76053	71402	-1.7824	-0.32381	0.66535	2.77675
OKOP392025	11/23/00	12:16	-4.04236	112.7339	-0.90806	69055.5	-3.80244	3.62528	3.85094	-0.08755
OKOP392026	11/23/00	12:24	-3.40734	10.11578	-7.58553	68870.5	-8.23415	2.67581	1.24579	5.18437
OKOP392027	11/23/00	12:33	-4.21894	23.54205	-3.5825	70592	-2.31851	3.07067	4.1313	-2.68067
OKOP392028	11/23/00	12:41	-3.66327	56.38102	-2.36258	65458	-4.14059	4.83918	7.73158	5.64617
OKOP392029	11/23/00	12:50	-4.15466	380.1443	-3.85341	66164.5	-0.52159	0.28037	3.19044	2.80202
OKOP505001	11/23/00	12:58	-4.22389	-0.69161	7.93352	68180.5	2.11186	0.02652	14.77553	1.96784
OKOP505002	11/23/00	13:06	-3.86458	-0.77548	5.64018	73303.5	0.90669	2.83281	15.60153	2.75054
OKOP505003	11/23/00	13:15	-3.95224	-1.35806	8.10147	71749	-4.44413	4.1465	14.69163	3.41352
OKOP505004	11/23/00	13:23	-4.03181	-0.61439	10.35062	72026	-1.6926	-0.30637	12.50887	0.99227
OKOP505005	11/23/00	13:32	-4.55609	-1.58204	5.55881	72661	-4.83108	3.73564	17.33209	9.22914
CCV	11/23/00	13:40	628.9268	665.3676	2.51729	67824	2154.066	2112.908	1067.947	1045.702
CCV1	11/23/00	13:48	-4.1323	0.77442	5245.364	69436.5	1.55691	-0.24884	1.27515	3.84272
CCB	11/23/00	13:57	-9.91029	-2.9661	-4.29281	70330	54.03425	-25.2801	37.39103	-23.7348
OKOP505006	11/23/00	14:05	-4.73314	-0.73629	6.55505	72240	0.22361	-0.8272	16.83977	3.93441
OKOP505007	11/23/00	14:14	-5.12915	-1.48625	8.40478	69105.5	2.14299	1.56426	19.91296	2.94486
OKOP505008	11/23/00	14:22	-4.12767	-1.11278	3.86965	72407	-5.23577	1.01643	6.11309	6.43804
OKOP505009	11/23/00	14:30	-3.1582	-1.07184	3.99072	72057	1.37235	1.41959	16.08332	5.38807
OKOP505010	11/23/00	14:39	-4.53047	-1.1606	7.10051	76718.5	1.54746	1.05616	16.43282	4.31261
OKOP505011	11/23/00	14:47	-4.94263	-1.23364	7.66557	75927	-3.66862	1.48366	23.30337	2.26171
OKOP505012	11/23/00	14:56	-4.03321	-1.14157	3.52749	73948	-5.00228	0.42548	15.46735	12.2928
OKOP505013	11/23/00	15:04	-3.70085	-1.37443	6.4045	75855.5	-3.16378	1.17955	10.73282	7.35255
OKOP505014	11/23/00	15:12	-3.6213	-0.81296	6.2284	75994.5	-3.44082	2.30247	9.29779	5.70593
OKOP505015	11/23/00	15:21	-3.95064	-1.22302	6.97925	71456	-3.09565	1.86959	12.28385	-0.51597
CCV	11/23/00	15:29	627.1984	660.1691	0.19458	69800.5	2161.564	2119.696	1071.104	1035.436
CCV1	11/23/00	15:38	-2.71788	1.32126	5235.838	71258	-4.05493	3.4235	3.2645	0.82116
CCB	11/23/00	15:46	-0.15073	1.17661	7.58297	71605	30.3477	-16.6176	25.37797	-13.8613
OKOP505016	11/23/00	15:55	-4.03118	-0.89357	5.39768	75340.5	-5.85922	0.50517	12.91443	4.54782
OKOP505017	11/23/00	16:03	-3.6595	-0.76421	8.19161	71457	-4.46886	2.06616	11.64403	6.80982
OKOP505018	11/23/00	16:11	-4.46893	-0.829	4.92976	71967	-6.83894	1.31035	13.88155	1.05226
OKOP505019	11/23/00	16:20	-3.87307	-0.60571	5.95368	77040	-6.76951	2.15972	14.15845	9.04321
OKOP505020	11/23/00	16:28	-4.20404	-0.22922	4.99984	73988	-8.25208	1.32475	8.60591	11.87616

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
CRI1	11/23/00	16:37	14.94884	-13.6062	14.95447		406.0466	10.47318	7.17544	10.77676	107.0684	19.51198	46.94872	-92.1295
ICSA1	11/23/00	16:45	-4.67154	106515.4	-8.23155		-0.32351	-0.32495	109441.3	-1.8068	-3.12433	-4.35285	-7.3002	43938.67
ICSAB1	11/23/00	16:53	634.3044	106347.2	2155.618		621.2179	215.7122	108891.5	640.8917	626.0667	644.6758	605.7188	43702.73
CCV	11/23/00	17:02	626.2316	26446.03	2146.125		617.619	215.5304	27441.55	650.0134	646.3987	636.2684	594.1896	10874.61
CCV1	11/23/00	17:10	-4.47732	-10.8139	-8.19129		-0.67363	-0.35096	5.53772	-0.71908	-2.73517	-5.64027	-6.25516	-67.7962
CCB	11/23/00	17:19	-10.0457	-36.3116	-14.2251		-1.5478	-0.60338	-9.81114	-1.36701	-6.34938	-6.22847	-7.06528	-135.748

Sample_Name	Date	Time	Potassium	agnesi	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
CRI1	11/23/00	16:37	121.7497	-31.0693	34.20248	-2.97814	1.07292	88.28457	6.37086	107.2392	7.98898		16.21905	
ICSA1	11/23/00	16:45	170.5284	111490.9	5.24946	-3.25706	23.86984	-4.15923	6.87135	-15.0684	-2.52538		0.68273	
ICSAB1	11/23/00	16:53	40073.81	110718.9	436.9539	631.7839	10235.2	641.3865	2129.271	1050.727	1052.349		2124.762	
CCV	11/23/00	17:02	39141.28	27260.52	437.6499	3124.283	19475.91	651.1937	2095.121	10484	1034.29		2138.491	
CCV1	11/23/00	17:10	5168.054	-25.9415	0.03969	-1.18502	-4.54252	-4.18684	-1.01739	-13.5732	3.44264		0.22794	
CCB	11/23/00	17:19	122.6108	-56.2959	-0.75113	-5.46079	-19.0968	-7.70449	-0.12784	-29.105	-0.7654		-22.2866	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
CRI1	11/23/00	16:37	103.9351	44.98406	669.3201	74309.5	11.18559	3.96688	12.53029	5.72157
ICSA1	11/23/00	16:45	-5.36592	-1.81326	-4.52165	67805.5	12.10531	4.2581	2.36058	-4.96488
ICSAB1	11/23/00	16:53	644.5953	643.6765	1041.056	65876.5	2157.916	2114.97	1072.158	1042.458
CCV	11/23/00	17:02	640.3248	661.5591	3.88175	66542	2117.26	2084.068	1057.548	1022.678
CCV1	11/23/00	17:10	-4.0477	0.61417	5110.649	66890.5	-18.803	7.86185	-6.25191	8.28248
CCB	11/23/00	17:19	-7.58804	-2.18614	-10.4544	70284.5	14.76482	-7.56323	18.01187	-10.1401

Method: 6010B

Slope = Conc(SIR)/1R

Element	Wavelen	High std	Low std	Slope	Y-intercept	Date Standardized
Ag	328.068	Multiple	Standards	1306.17	-4.64640	11/23/00 00:09:11
Al	308.215	Multiple	Standards	1664.20	/8.6795	11/23/00 00:09:11
As	189.042	Multiple	Standards	4137.89	-6.58188	11/23/00 00:09:11
Ba	493.409	Multiple	Standards	1487.53	-1.008356	11/23/00 00:09:11
Be	313.042	Multiple	Standards	839.938	3.35924	11/23/00 00:09:11
Ca	317.933	Multiple	Standards	14746.7	-42.4316	11/23/00 00:09:11
Cd	226.502	Multiple	Standards	496.032	-5.900143	11/23/00 00:09:11
Co	228.616	Multiple	Standards	3065.12	-2.93660	11/23/00 00:09:11
Cr	267.716	Multiple	Standards	2498.59	-5.43729	11/23/00 00:09:11
Cu	324.754	Multiple	Standards	2579.26	-6.78636	11/23/00 00:09:11
Fe	271.441	Multiple	Standards	58050.8	-53.4020	11/23/00 00:09:11
K	766.491	Multiple	Standards	3699.77	-2945.76	11/23/00 00:09:49
Mg	279.079	Multiple	Standards	20690.3	-31.3877	11/23/00 00:09:11
Mn	257.610	Multiple	Standards	2300.03	-1.819866	11/23/00 00:09:11
Mo	202.030	Multiple	Standards	4610.87	-3.28871	11/23/00 00:09:11
Na	588.995	Multiple	Standards	1057.43	-121.938	11/23/00 00:09:11
Ni	231.604	Multiple	Standards	1692.25	-4.14938	11/23/00 00:09:11
2203/1	220.351	Multiple	Standards	988.879	-3.77803	11/23/00 00:09:11
2203/2	220.352	Multiple	Standards	3892.08	1.87761	11/23/00 00:09:11
Sb	206.838	Multiple	Standards	9105.14	-17.3330	11/23/00 00:09:11
1960/1	196.021	Multiple	Standards	5808.85	2.39436	11/23/00 00:09:11
1960/2	196.022	Multiple	Standards	6938.52	.746263	11/23/00 00:09:11
Pb	220.353	NONE	NONE	1.000000	.0000000	*NUT STANDARDIZED
Se	196.026	NONE	NONE	1.000000	.0000000	*NUT STANDARDIZED
Sn	189.989	Multiple	Standards	4684.03	-7.76247	11/23/00 00:09:49
Tl	190.864	Multiple	Standards	7977.82	2.61131	11/23/00 00:09:11
V	292.402	Multiple	Standards	18569.7	-3.98316	11/23/00 00:09:11
Zn	206.200	Multiple	Standards	57.30.36	-2.98161	11/23/00 00:09:11

Method: 6010B

Element Wavelength
mg 328.068Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.000000
375.000
750.000
1500.000Measured Concentration
.043350
369.545
750.499
1324.50Residual Concentration
.043350
3.49499
-.498718
-24.4963

CorCoef: 0.99995

Element Wavelength
ml 308.215Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.000000
6250.00
12500.0
25000.0Measured Concentration
.674619
6169.62
12550.3
25332.5Residual Concentration
.674619
30.48E3
-104.41E3
-532.477

CorCoef: 0.99996

Element Wavelength
As 189.042Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.000000
1250.00
2500.00
5000.00Measured Concentration
.197719
1324.04
2499.00
5107.93Residual Concentration
.197719
-33.9373
1.0041E6
-107.979

CorCoef: 0.99990

Element Wavelength
Ba 493.409Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.000000
375.000
750.000
1500.000Measured Concentration
.0191400
373.333
750.433
1307.000Residual Concentration
-.0191400
1.13325
-1.4389E3
-7.07593

CorCoef: 1.000000

Element Wavelength
Be 313.042Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.000000
125.000
250.000
500.000Measured Concentration
.0167018
122.544
249.503
509.216Residual Concentration
-.0167018
3.00612
-.096771
-9.81771

CorCoef: 0.99993

Element Wavelength
Ca 317.933Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.0000000
6250.00
12500.0
25000.0Measured Concentration
.991673
6125.16
12551.3
25471.4Residual Concentration
-.991673
124.843
-81.3876
-41.381

CorCoef: 0.99993

Element Wavelength
Cd 226.502Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.0000000
375.000
750.000
1500.000Measured Concentration
.050679
367.734
750.193
1326.14Residual Concentration
-.050679
7.31631
-3.19384
-2.3.1361

CorCoef: 0.99995

Element Wavelength
Co 228.616Standard
BLANK
STD 3
STD 4
STD 5Known Concentration
.0000000
375.000
750.000
1500.000Measured Concentration
.067387
365.886
751.899
1324.64Residual Concentration
-.067387
9.11423
-1.79883
-34.6434

CorCoef: 0.99989

Standardization		Readback Report		11/24/00 03:07:13 PM	page 2	
Element	Wavelength	Standard		Known Concentration	Measured Concentration	Residual Concentration
Cr	267.716	BLANK		.0000000	.0173610	- .0173610
		STD 3		375.000	368.468	18.5321
		STD 4		750.000	766.144	- 16.1440
		STD 5		1500.000	1517.84	- 17.8402
		CorCoef: 0.99988				
Cu	324.754	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	.049363	- .049363
		STD 3		375.000	368.219	3.78107
		STD 4		750.000	765.798	- 15.7983
		STD 5		1500.000	1507.43	- 7.43091
CorCoef: 0.99990						
Fe	271.441	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	.0401443	- .0401443
		STD 3		2500.000	2433.46	41.5410
		STD 4		5000.000	5066.05	- 66.0419
		STD 5		10000.000	10363.8	- 363.811
CorCoef: 0.99987						
K	766.491	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	1.04688	- 1.04688
		STD 6		2500.000	2518.00	10.540
		STD 7		5000.000	5054.11	- 54.113
		STD 8		10000.000	10019.6	- 19.670
CorCoef: 0.99940						
Mg	279.079	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	1.36006	- 1.36006
		STD 3		6250.000	6033.00	136.477
		STD 4		12500.000	11763.59	- 736.536
		STD 5		25000.000	25693.43	- 693.386
CorCoef: 0.99984						
Mn	257.610	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	.029225	- .029225
		STD 3		250.000	245.892	4.10837
		STD 4		500.000	501.870	- 1.97037
		STD 5		1000.000	1013.09	- 13.8929
CorCoef: 0.99996						
Mo	202.030	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	.007881	- .007881
		STD 3		750.000	733.000	11.9921
		STD 4		1500.000	1501.65	- 1.64771
		STD 5		3000.000	3044.67	- 44.6731
CorCoef: 0.99995						
Na	588.995	Standard		Known Concentration	Measured Concentration	Residual Concentration
		BLANK		.0000000	.139688	- .139688
		STD 3		2500.000	2473.84	21.1587
		STD 4		5000.000	5015.21	- 15.2100
		STD 5		10000.000	10034.2	- 34.2168
CorCoef: 0.99999						

Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Li	231.604	BLANK	.0000000	.049374	-.049374
		STD 3	375.000	368.011	6.9889
		STD 4	750.000	750.908	-.907919
		STD 5	1500.000	1503.835	-.835833
CorCoef: 0.99994					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/1	220.351	BLANK	.0000000	.220670	-.220670
		STD 3	1250.000	1214.93	35.1213
		STD 4	2500.000	2560.76	-60.7603
		STD 5	5000.000	5033.82	-33.8174
CorCoef: 0.99989					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
2203/2	220.352	BLANK	.0000000	.111225	-.111225
		STD 3	1250.000	1286.17	-31.8269
		STD 4	2500.000	2579.53	-79.5300
		STD 5	5000.000	5099.37	-99.3700
CorCoef: 0.99996					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Sb	206.838	BLANK	.0000000	.217705	-.217705
		STD 3	2500.000	2454.58	45.4750
		STD 4	5000.000	4961.98	18.0166
		STD 5	10000.000	10032.49	-92.9238
CorCoef: 0.99997					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/1	196.021	BLANK	.0000000	.111913	-.111913
		STD 3	625.000	606.730	18.2756
		STD 4	1250.000	1269.87	-19.1747
		STD 5	2500.000	2533.26	-66.1550
CorCoef: 0.99993					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
1960/2	196.022	BLANK	.0000000	.043419	-.043419
		STD 3	625.000	613.133	9.36658
		STD 4	1250.000	1269.48	-19.4817
		STD 5	2500.000	2493.03	6.97070
CorCoef: 0.99992					
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Pb	220.353	NONE	.0000000	.0000000	0.000000
		NONE	.0000000	.0000000	0.000000
Element	Wavelength	Standard	Known Concentration	Measured Concentration	Residual Concentration
Se	196.026	NONE	.0000000	.0000000	0.000000
		NONE	.0000000	.0000000	0.000000

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Element	Wavelength	Standard		Known Concentration	Measured Concentration	Residual Concentration
Sn	189.989	BLANK		.0000000	.5338433	-.5338433
		STD 6		2500.00	2413.00	86.9785
		STD 7		5000.00	5094.00	-94.7983
		STD 8		10000.0	10153.3	-153.319
CorCoef: 0.99989						
Element	Wavelength	Standard		Known Concentration	Measured Concentration	Residual Concentration
Tl	190.864	BLANK		.0000000	.184879	-.184879
		STD 3		1250.00	1223.07	26.9288
		STD 4		2500.00	2500.27	-.273438
		STD 5		5000.00	5047.07	-47.0742
CorCoef: 0.99992						
Element	Wavelength	Standard		Known Concentration	Measured Concentration	Residual Concentration
V	292.402	BLANK		.0000000	.057215	-.057215
		STD 3		375.000	366.996	8.00418
		STD 4		750.000	752.731	-2.73071
		STD 5		1500.00	1547.27	-47.2717
CorCoef: 0.99994						
Element	Wavelength	Standard		Known Concentration	Measured Concentration	Residual Concentration
Zn	206.200	BLANK		.0000000	.066631	-.066631
		STD 3		375.000	366.643	8.35745
		STD 4		750.000	752.069	-2.06934
		STD 5		1500.00	1537.14	-37.1356
CorCoef: 0.99989						

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
BLANK	11/28/00	22:32	0.00034	-0.00061	0.00039		0.00034	-0.00476	0.00224	0.00048	0.00003	0.00006	0.00134	0.00013
STD 3	11/28/00	22:39	0.27304	0.03413	0.22831		0.25661	0.11404	0.33012	0.53848	0.09526	0.12464	0.14488	0.03553
STD 4	11/28/00	22:46	0.55038	0.06977	0.46121		0.51719	0.23551	0.66167	1.08108	0.1926	0.24787	0.28616	0.07182
STD 5	11/28/00	22:53	1.13034	0.14345	0.93592		1.05552	0.48537	1.35293	2.18366	0.39359	0.5016	0.57681	0.14641
STD 6	11/28/00	23:00												
STD 7	11/28/00	23:05												
STD 8	11/28/00	23:09												
STD 5	11/28/00	23:15	1503.819	24956.4	5044.369		1493.036	505.687	25294.19	1516.584	1508.355	1491.541	1474.58	10081.54
STD 8	11/28/00	23:21	-1.48386	-4.07971	-1.60862		-0.39684	0.25127	30.89342	-0.2349	-0.88135	0.79366	0.70772	-52.4614
ICV	11/28/00	23:28	1951.341	1895.013	1943.56		1942.305	1930.913	1989.835	1972.427	1969.811	1939.571	1912.284	1968.586
ICV1	11/28/00	23:35	0.47836	1.00511	1.90591		0.15091	0.37025	25.72907	0.2973	0.67588	2.01128	1.46794	-13.1041
ICB	11/28/00	23:42	-1.38705	-10.2147	-0.82471		-0.34756	0.59938	0.23261	-0.06814	-0.95652	1.6472	1.39038	-18.8726
ICB	11/29/00	0:01	-1.14564	-4.15879	-1.24681		-0.26392	0.2909	1.45593	-0.04955	0.11534	1.5547	0.93836	-29.6925
CCV	11/29/00	0:08	603.1215	25135.17	2076.094		602.308	207.4141	25978.91	626.254	630.1913	614.4267	594.1763	10296.62
CCV1	11/29/00	0:15	-0.80524	-12.5327	-2.19082		-0.07247	0.14989	8.84269	-0.25377	-0.76495	0.53871	1.02119	-30.1588
CCB	11/29/00	0:33	0.6966	0.83129	1.84261		0.99551	0.17337	3.43654	0.26061	1.23794	3.14191	2.38375	89.2644
CRI	11/29/00	0:40	19.1343	0.77148	21.25638		397.3976	10.53296	3.75352	10.4971	102.8477	21.20069	49.81296	3.53176
ICSA	11/29/00	0:47	-0.92824	96588.18	-2.35504		0.23518	0.49626	97453.79	-0.23095	0.04746	0.13761	-1.67218	38978.77
ICSAB	11/29/00	0:54	602.4097	100209.3	2034.953		593.8151	202.1506	100814.6	602.3291	593.6699	602.4358	597.0001	40229.64
PB M6 11/20 G	11/29/00	1:12	114.9414	11197.92	-273.926		288.3314	20.89241	43244.08	45.29427	59.41096	266.3378	502.8463	42629.86
LCS	11/29/00	1:21	182277	229895.2	175498.5		188086.1	177838.3	218816.7	182234.6	181274.3	181711.1	175480.4	252601.3
OKOP367009 MS	11/29/00	1:29	181513	12219876	197638.1		297580	176113	10035707	176454	197659.3	231030.8	277582.2	38845816
OKOP367010 MD	11/29/00	1:39	49.81225	10117500	18167		120747.9	355.6816	15406148	1187.241	19053.96	49883.13	141605.4	27074064
PB M1 11/21 M	11/29/00	1:51	-1.21771	-2.3974	-6.4652		-0.0066	0.22933	31.57973	-0.23722	-0.38649	1.39953	1.3208	23.12627
LCS	11/29/00	2:00	1951.818	1913.045	1680.283		1939.501	1667.85	1749.325	1720.802	1689.321	1703.984	1644.183	1690.979
OKOP500001	11/29/00	2:08	-0.90437	1438.18	-6.16937		56.46002	0.45369	89237.02	0.14847	39.71136	27.43099	26.4327	1168.874
PB M1 11/10 NN	11/29/00	2:20	-1.22482	14.13315	-7.53613		1.18822	0.2928	66.91324	-0.23694	-0.44778	1.9664	1.69612	1.83049
LCS	11/29/00	2:29	2047.241	2005.046	2089.695		2041.165	2084.52	2186.753	2157.474	2127.589	2106.583	2031.75	2140.611
OKOP267001	11/29/00	2:37	-0.36213	98.26782	-7.20502		13.54286	0.60816	27037.02	0.04906	-0.03983	2.54427	11.15357	126.1142
CCV	11/29/00	2:45	595.8865	24688.71	2042.655		593.6447	206.8658	26019.66	626.389	629.7239	610.3124	584.0226	10177.75
CCV1	11/29/00	2:54	-0.12298	-12.8998	-6.08396		-0.0489	0.2463	12.45002	-0.41027	-0.52365	0.91815	1.64011	-16.6377
CCB	11/29/00	3:02	-0.57111	-5.44352	-7.31659		-0.11892	0.5069	1.63311	-0.31845	-0.27732	0.73343	0.45424	-17.7254
OKOP267001 L	11/29/00	3:11	-1.2228	25.4603	-35.1882		12.7903	1.93622	26637.83	-1.32939	-1.07172	5.6961	15.46257	22.84091
CCB	11/29/00	3:19	-0.77843	-17.7614	-3.84462		-0.15412	0.25452	2.78969	-0.48329	-0.18006	0.81337	0.5533	1.15869
OKOP267001 L	11/29/00	3:30	-3.52731	42.89523	-29.76		12.90499	1.83391	26856.31	-0.92724	-3.17817	3.98198	12.67597	84.36863
OKOP267001 MD	11/29/00	3:39	0.42477	100.5646	-5.33938		12.78081	0.37726	25718.84	0.00731	0.35058	3.22535	11.50528	101.4398
OKOP267001 MS	11/29/00	3:47	2074.874	2141.023	2113.77		2083.192	2108.312	28843.79	2145.226	2139.347	2087.312	2056.282	2274.429
OKOP267001 MSD	11/29/00	3:55	2134.536	2213.512	2160.13		2166.327	2161.452	30151.13	2191.06	2196.58	2168.034	2146.116	2384.633
OKOP294002	11/29/00	4:08	-0.926	42.22156	-3.39591		9.29656	0.46805	34220.74	-0.47477	0.12772	2.25711	3.28592	80.58099
OKOP367004	11/29/00	4:22	-2.52417	85546.73	148.3741		1005.318	4.60672	106419.4	9.75303	160.2352	466.2567	1030.505	258127.1
OKOP367004 MD	11/29/00	4:31	-0.7673	79788.99	149.8433		1211.395	4.5852	102611.8	11.18921	184.8506	533.3774	884.5076	333448.1

Sample_Name	Date	Time	Potassium	agnesi	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
BLANK	11/28/00	22:32	0.58538	0.00026	0.0001	0.00085	0.06547	0.00035		0.00046			0.00027	
STD 3	11/28/00	22:39		0.2252	0.09138	0.12886	2.07595	0.15458		0.23412			0.12119	
STD 4	11/28/00	22:46		0.45456	0.18532	0.25992	4.1136	0.3103		0.47397			0.24589	
STD 5	11/28/00	22:53		0.93896	0.37798	0.53031	8.31965	0.62738		0.96523			0.50315	
STD 6	11/28/00	23:00	1.24073											
STD 7	11/28/00	23:05	1.83922											
STD 8	11/28/00	23:09	3.14883											
STD 5	11/28/00	23:15	85880.07	25308.24	1009.549	3023.108	9947.1	1512.503	5058.438	10069.17	2513.655		5082.649	
STD 8	11/28/00	23:21	9792.303	-8.47928	-0.12709	3.03847	36818.76	-1.16601	-0.75231	-2.42287	2.76523		-3.93125	
ICV	11/28/00	23:28	18523.99	1990.363	1947.496	1965.778	1950.174	1961.32	1937.452	1949.332	1920.231		1957.325	
ICV1	11/28/00	23:35	399.9376	7.13062	0.32186	1.21656	9629.641	0.99728	0.14384	-1.26254	0.15054		-6.73536	
ICB	11/28/00	23:42	92.57049	-6.91559	-0.17829	-2.70003	0.5274	-1.77199	0.29568	0.83476	3.92937		-7.16626	
ICB	11/29/00	0:01	125.2839	-8.87943	0.00278	-3.70111	3.7508	-0.31149	-0.93604	-2.06958	1.34601		-7.88966	
CCV	11/29/00	0:08	37434.82	25996.63	410.1174	3085.095	19449.59	619.4698	2064.688	10268.13	1019.247		2077.169	
CCV1	11/29/00	0:15	5055.127	-3.24889	-0.1749	1.97073	9.44859	-1.0137	-0.32228	-3.53992	4.21699		-7.29944	
CCB	11/29/00	0:33	317.5895	11.98758	0.13015	-1.95035	8.16939	0.70149	-2.30333	3.50428	0.31324		-4.76051	
CRI	11/29/00	0:40	244.6161	2.54078	30.63488	-3.90294	5.89257	84.28758	3.46795	121.5013	11.23261		12.43855	
ICSA	11/29/00	0:47	-94.3296	100843.7	1.17469	-3.58342	2.6542	1.12568	2.39035	-2.42217	2.90497		-11.8374	
ICSAB	11/29/00	0:54	37444.13	103777.5	401.5024	605.137	9998.073	597.4092	2005.629	1015.404	990.2905		2003.298	
PB M6 11/20 G	11/29/00	1:12	53466.46	12635.22	229.3314	-317.754	28568.87	196.3139	92.432	402.3748	15.75917		-580.979	
LCS	11/29/00	1:21	1694181	192359.9	181057.9	176629.9	208227.3	181865.5	181753.3	172931.3	162507		177367.3	
OKOP367009 MS	11/29/00	1:29	2238177	4017778	3176133	175198.8	324542.7	202109.1	1765459	134634	154601		172708.2	
OKOP367010 MD	11/29/00	1:39	646048.6	6191321	195788.3	1291.316	146897.1	18984.26	3818895	1251.103	725.6754		781.5944	
PB M1 11/21 M	11/29/00	1:51	230.6183	-3.65491	0.22156	-4.31204	30.1525	-0.36818	-0.74173	-0.55644	2.95876		-8.80214	
LCS	11/29/00	2:00	18606.38	1707.015	1659.29	1682.352	1981.337	1700.224	1706.654	1656.818	1641.514		1681.985	
OKOP500001	11/29/00	2:08	2989.687	25145.92	76.53655	0.56875	48876.12	5.87987	-2.49445	-2.71952	3.74949		-10.6299	
PB M1 11/10 NN	11/29/00	2:20	280.6923	1.72773	0.15435	-4.16744	15.91998	-1.4542	-2.19077	-3.54657	5.01991		-5.66726	
LCS	11/29/00	2:29	19422.46	2161.513	2076.581	2129.897	2082.716	2120.778	2123.097	2075.877	2038.229		2100.047	
OKOP267001	11/29/00	2:37	11895.1	8261.662	22.20969	0.20027	50592.32	1.94024	1.20104	-1.20071	2.37492		-11.719	
CCV	11/29/00	2:45	37271.02	26040.85	402.5222	3068.28	19392.01	611.8961	2052.866	10115.49	1000.614		2046.332	
CCV1	11/29/00	2:54	5182.01	0.1216	0.07774	0.84446	16.82649	-0.92049	-0.1629	-0.01161	1.90943		-9.49594	
CCB	11/29/00	3:02	315.6611	-8.73335	-0.15023	-3.56029	4.31846	-1.23474	-1.94068	-1.94	-2.8877		-8.94414	
OKOP267001 L	11/29/00	3:11	14460.48	8125.832	21.01263	-16.4279	55648.8	-2.29868	-19.9878	1.84103	5.90527		45.8757	
CCB	11/29/00	3:19	324.6234	-2.03948	-0.16914	-3.79796	5.24233	0.07829	0.90184	-1.8105	2.89606		-9.41815	
OKOP267001 L	11/29/00	3:30	14370.23	8172.84	22.17451	-23.8001	55305.54	-1.3117	-4.3845	4.60987	16.34742		-40.3	
OKOP267001 MD	11/29/00	3:39	11238.48	7876.073	21.19676	-3.23956	48213.87	2.89796	0.06753	5.20538	2.20688		-7.15005	
OKOP267001 MS	11/29/00	3:47	30572.86	10311.07	2121.303	2128.35	51267.77	2141.068	2137.039	2083.086	1985.873		2110.822	
OKOP267001 MSD	11/29/00	3:55	31905.51	10768.67	2176.165	2203.463	54142.29	2192.813	2196.558	2139.584	2046.96		2160.553	
OKOP294002	11/29/00	4:08	22946.54	9682.628	36.61443	36.84259	146537.4	1.20051	-0.33312	-5.43389	2.15898		-3.79705	
OKOP367004	11/29/00	4:22	7318.27	32337.49	1919.838	-4.64882	1326.775	179.4588	33143.4	-11.7347	-13.0617		-29.6856	
OKOP367004 MD	11/29/00	4:31	7559.084	38892.68	12475.21	-9.55304	1332.355	175.388	49887.91	2.9558	13.46202		2.44659	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
BLANK	11/28/00	22:32	0.00009	0.00018	0.00017	59441.5	-0.00178	0.0008	-0.00142	0.00054
STD 3	11/28/00	22:39	0.02613	0.04215		56032.5	0.97712	0.2382	0.0862	0.07113
STD 4	11/28/00	22:46	0.05281	0.08455		55636	1.8975	0.47892	0.16818	0.14198
STD 5	11/28/00	22:53	0.10787	0.17247		54006.5	3.83214	0.98522	0.33719	0.29239
STD 6	11/28/00	23:00			0.36819	56459				
STD 7	11/28/00	23:05			0.74	57697				
STD 8	11/28/00	23:09			1.529	51018.5				
STD 5	11/28/00	23:15	1510.47	1522.113	13.81546	54809	5047.998	5063.652	2506.22	2517.367
STD 8	11/28/00	23:21	-2.58902	0.04702	10089.09	57727	8.72961	-5.48641	11.22835	-1.46019
ICV	11/28/00	23:28	1951.867	1991.4	6.40714	55090.5	1966.523	1922.939	1955.949	1902.398
ICV1	11/28/00	23:35	-0.71083	0.71837	2039.558	54746.5	6.65658	-3.10792	2.36026	-0.95287
ICB	11/28/00	23:42	-2.29734	-0.45343	0.00262	59944	5.11272	-2.10947	12.80052	-0.49974
ICB	11/29/00	0:01	-1.94325	-0.82791	2.75525	59994.5	12.03894	-7.41405	13.64031	-4.79212
CCV	11/29/00	0:08	605.9369	635.2463	9.53626	58224	2076.417	2058.832	1030.898	1013.431
CCV1	11/29/00	0:15	-1.97271	0.4666	5167.606	56631	3.05548	-2.00889	7.12316	2.76587
CCB	11/29/00	0:33	4.10872	1.70022	3.18972	57063.5	2.05347	-4.47873	7.85412	-3.45174
CRI	11/29/00	0:40	101.6721	43.06326	641.6573	58552	4.40087	3.00193	13.65138	10.02484
ICSA	11/29/00	0:47	-1.50034	-3.04911	0.39696	63693	3.1784	1.99668	11.97244	-1.62214
ICSAB	11/29/00	0:54	599.7819	599.9213	1005.001	59704.5	2060.733	1978.118	1018.202	976.3554
PB M6 11/20 G	11/29/00	1:12	16.91712	1358.445	3233.699	54738.5	1111.296	-416.264	-601.662	323.9848
LCS	11/29/00	1:21	179389.3	187048.5	191286.9	55755.5	182683.5	181288.8	161432.1	163043.7
OK0P367009 MS	11/29/00	1:29	209561.3	1128741	193173.9	58517	1767014	1764683	157805.8	153001
OK0P367010 MD	11/29/00	1:39	21055.68	1025771	9144.22	57327	3853608	3801564	2358.866	-89.7167
PB M1 11/21 M	11/29/00	1:51	-0.5021	1.73098	-0.92806	57806.5	2.25575	-2.23849	-2.53472	5.70118
LCS	11/29/00	2:00	1659.323	1750.677	2058.197	57324.5	1753.26	1683.385	1686.949	1618.83
OK0P500001	11/29/00	2:08	1.74145	56.54939	0.38226	56523	0.41092	-3.94523	5.20769	3.02127
PB M1 11/10 NN	11/29/00	2:20	-1.36263	2.20689	0.07866	57575.5	2.87408	-4.71966	9.67513	2.69558
LCS	11/29/00	2:29	2068.537	2199.107	2157.473	57696.5	2142.611	2113.354	2053.324	2030.692
OK0P267001	11/29/00	2:37	-0.98114	202.637	-0.01586	54836	7.89837	-2.14286	1.14925	2.98661
CCV	11/29/00	2:45	597.3973	642.1356	7.16914	53212.5	2080.96	2038.84	1008.21	996.8212
CCV1	11/29/00	2:54	-1.48694	2.70651	5140.62	54933	7.81155	-4.14443	9.15945	-1.71035
CCB	11/29/00	3:02	-0.86815	0.9667	2.13012	57790	0.49174	-3.15534	-0.72627	-3.967
OK0P267001 L	11/29/00	3:11	-4.25985	200.017	12.92764	55138.5	18.16241	-39.0357	39.37673	10.8064
CCB	11/29/00	3:19	-0.86813	-0.25668	0.62116	57139	4.24498	-0.76748	4.55051	2.06987
OK0P267001 L	11/29/00	3:30	-4.92692	201.0244	-5.32249	56140	8.84216	-10.9893	48.55516	0.26663
OK0P267001 MD	11/29/00	3:39	-1.11935	192.0863	3.66897	58869	8.09875	-3.9423	2.46679	2.07691
OK0P267001 MS	11/29/00	3:47	2105.316	2411.786	2175.598	59572	2150.449	2130.344	1989.923	1983.851
OK0P267001 MSD	11/29/00	3:55	2159.966	2459.55	2219.357	57727.5	2199.622	2195.028	2049.352	2045.766
OK0P294002	11/29/00	4:08	1.00347	55.63351	0.65361	56940	1.2116	-1.10459	3.78043	1.34926
OK0P367004	11/29/00	4:22	212.4986	8981.906	92.3466	58171	33485.09	32972.81	27.76088	-33.4435
OK0P367004 MD	11/29/00	4:31	230.1436	10010.41	83.63815	58761.5	51535.45	49065.38	66.70633	-13.1212

Sample_Name	Date	Time	Silver	Aluminu	Arsenic	Boron	Barium	Beryllium	Calcium	Cadmium	Cobalt	Chromiu	Copper	Iron
0K0P367004 MS	11/29/00	4:39	1659.052	90174.3	1870.943		2922.178	1708.867	108837	1760.505	1886.245	2120.432	2439.564	206517.8
CRI	11/29/00	4:47	18.84287	-17.0185	14.17853		406.3424	10.79571	8.01226	10.93813	105.9109	21.417	50.67621	2.91116
ICSA	11/29/00	4:58	-1.74476	100623.7	-3.74178		0.33137	0.32964	102116.7	-0.34824	-0.64881	-0.11282	-1.96319	40375
ICSAB	11/29/00	5:06	594.2398	98070.75	2023.542		585.9011	202.9679	101426.5	609.5892	598.5372	591.764	573.2067	39993.45
CCV	11/29/00	5:15	596.7037	24866.62	2058.935		594.0348	205.9613	25898.67	626.0497	627.6725	602.4633	583.4166	10130.91
CCV1	11/29/00	5:24	-0.44698	-12.1973	-6.89879		0.07276	0.14167	16.77707	-0.31815	0.08969	1.21666	1.29381	-18.3399
CCB	11/29/00	5:37	0.25018	-6.60535	-0.49501		-0.11925	0.46356	3.6023	0.29349	0.24598	1.59041	1.28263	-8.65719
0K0P367009	11/29/00	5:48	1783.268	121091	2028.407		2939.746	1743.197	100267.2	1792.566	1977.862	2326.245	2747.195	385237.7
0K0P367011	11/29/00	5:56	-2.10754	99323.4	172.6751		1183.851	3.9818	153446.2	11.97921	192.6897	502.5958	1376.305	270271.7
CCV	11/29/00	6:05	596.3864	24672.27	2029.79		594.9379	203.976	25599.19	615.7419	620.2048	603.0945	585.6367	10031.21
CCV1	11/29/00	6:13	-0.05722	-7.18923	-7.30401		0.10171	0.05939	14.2399	-0.23147	-0.26076	2.01668	1.30376	2.9631

Sample_Name	Date	Time	Potassium	agnesiu	anganes	olybedenu	Sodium	Nickel	Lead	Antimony	Selenium	Silicon	Titanium	Thallium
0K0P367004 MS	11/29/00	4:39	24826.41	44350.22	3470.152	1664.627	3194.941	1880.945	36389.95	1227.923	1677.296		1663.158	
CRI	11/29/00	4:47	373.0406	-5.20123	30.82686	-2.74094	9.83101	83.92924	4.559	123.4542	9.62699		13.25873	
ICSA	11/29/00	4:58	129.7798	105591.7	1.29275	-4.67661	6.24177	-1.86606	1.27367	3.14872	5.41889		-4.20295	
ICSAB	11/29/00	5:06	37125.23	104226.5	397.2996	603.986	9885.751	597.4781	2015.718	1005.946	979.2518		2000.11	
CCV	11/29/00	5:15	36947.91	26021.41	405.4413	3069.85	19310.29	612.6523	2047.332	10156.22	997.9869		2070.109	
CCV1	11/29/00	5:24	5206.18	5.93461	-0.06973	1.77135	11.88924	-0.03755	-1.97418	-1.35203	2.58283		-4.85961	
CCB	11/29/00	5:37	267.4159	5.10185	-0.03652	-4.25997	4.42968	0.1412	-3.30178	-0.81706	1.18704		-5.78132	
0K0P367009	11/29/00	5:48	25383.11	40235.45	32676.24	1723.059	3223.036	2027.017	18015.9	1373.548	1742.157		1732.078	
0K0P367011	11/29/00	5:56	8631.199	60673.64	1945.27	3.16138	1478.593	192.2073	38334.23	14.30171	13.30334		-0.5329	
CCV	11/29/00	6:05	37088.93	25701.97	399.5848	3046.01	19282.45	605.4979	2021.157	10087.17	994.6724		2030.416	
CCV1	11/29/00	6:13	5235.357	3.70679	0.09486	0.41816	17.84086	-1.4539	-1.14572	0.9734	2.81929		-7.93662	

Sample_Name	Date	Time	Vanadium	Zinc	Tin	Y_	2203/1	2203/2	1960/1	1960/2
OK0P367004 MS	11/29/00	4:39	1870.952	10969.77	1805.984	58099	36632.12	36269.05	1738.366	1646.806
CRI	11/29/00	4:47	102.825	45.19393	644.8124	56760.5	7.55263	3.06417	10.77532	9.05347
ICSA	11/29/00	4:58	-1.47725	-3.04539	2.3018	58736	2.66911	0.57673	14.30714	0.98123
ICSAB	11/29/00	5:06	592.1337	612.3868	1000.765	54950.5	2025.53	2010.819	993.5773	972.0997
CCV	11/29/00	5:15	597.8989	639.4362	10.06405	58856.5	2071.858	2035.087	1009.415	992.2811
CCV1	11/29/00	5:24	-1.07062	0.78211	5338.184	56856	5.35309	-5.63259	1.04851	3.34864
CCB	11/29/00	5:37	-0.85344	-0.20474	2.82428	58678.5	0.42968	-5.16497	0.86633	1.34695
OK0P367009	11/29/00	5:48	2050.627	11609.16	1917.44	59305	18211.95	17918.03	1808.434	1709.067
OK0P367011	11/29/00	5:56	201.3028	10482.44	93.00901	55169	38548.57	38227.23	71.43621	-15.7206
CCV	11/29/00	6:05	592.7286	626.7581	4.43671	52071.5	2038.34	2012.579	1001.484	991.2715
CCV1	11/29/00	6:13	-0.82416	0.93428	5084.48	51660	2.27754	-2.85508	6.45006	1.00639

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Line Wave, Concentration Units

ppb/BSD

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*** Standards: 1 Rep: 1

Seq: 6

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Hg .000 ppb -16
Ave. Int. =

-16 S. D. = 0

*** Standard: 2 Rep: 1

Seq: 1

09:11:28 21 Nov 2000 HG

Hg .500 ppb 20859
Ave. Int. =

20859 S. D. = 0

*** Standard: 3 Rep: 1

Seq: 2

09:13:41 21 Nov 2000 HG

Hg 1.00 ppb 41960
Ave. Int. =

41960 S. D. = 0

*** Standard: 4 Rep: 1

Seq: 3

09:16:02 21 Nov 2000 HG

Hg 2.00 ppb 83927
Ave. Int. =

83927 S. D. = 0

*** Standard: 5 Rep: 1

Seq: 4

09:18:31 21 Nov 2000 HG

Hg 5.00 ppb 222883
Ave. Int. =

222883 S. D. = 0

*** Standard: 6 Rep: 1

Seq: 5

09:21:11 21 Nov 2000 HG

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Ponton 1. DATE

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Rev: 3.06 Time: 09:21:17 21-Nov-2023

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10. *Staunton* cap. 6ds. 0.50 m.

Macro

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Page 2 of 28 2016 Series 9000000000000000

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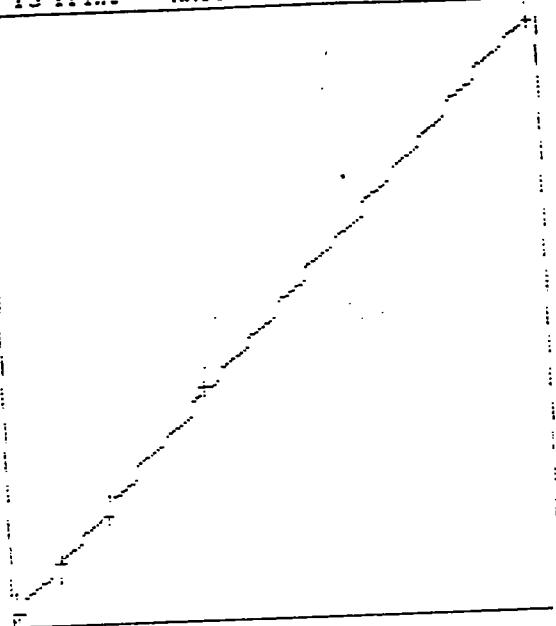
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CALIBRATION: Line Calibration



Rakesh Dhanukula
Digitized by srujanika@gmail.com

How calibration coefficients depend on distribution coefficients such

09:23:03 21 Nov 2000

Folder: 1121001A
Protocol: WATER WATER

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Line	Wave.	Conc.	Units	SD/RSD	i	2	3	4	5	
<hr/>										
*** Check Standard: 2 Ck2				Seq: 6	09:23:03 21 Nov 2000 HG					
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg				93.8	1.88	2.00	ppb	.000		
*** Check Standard: i Cki				Seq: 7	09:26:31 21 Nov 2000 HG					
Line	Wave.	Flag	Found	Range(+/-)	Units	SD/RSD				
Hg			,012	,500	ppb	,000				
*** Check Standard: 2 Ck2				Seq: 8	09:27:22 21 Nov 2000 HG					
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD			
Hg				97.8	1.96	2.00	ppb	.000		
*** Sample ID: CRA 0.5PPB				Seq: 9	09:30:12 21 Nov 2000 HG					
Hg				,491	ppb	.000	.491			
*** Sample ID: 0K0X020 199/201				Seq: 10	09:32:19 21 Nov 2000 HG					
Hg			PB	,046	ppb	,000	,046			
*** Sample ID: 0K0X020 200/202				Seq: 11	09:34:02 21 Nov 2000 HG					
Hg			LCS	2.00	ppb	.000	2.00			
*** Sample ID: 0K0P535003				Seq: 12	09:36:15 21 Nov 2000 HG					
Hg				,048	ppb	.000	,048			
*** Sample ID: MS				Seq: 13	09:37:58 21 Nov 2000 HG					
Hg			MS	1.65	ppb	,000	1.65			
*** Sample ID: 0K0P535005				Seq: 14	09:40:22 21 Nov 2000 HG					
Hg				,039	ppb	,000	,039			
*** Sample ID: 0K0P535007				Seq: 15	09:42:07 21 Nov 2000 HG					
Hg				,040	ppb	.000	,040			
*** Sample ID: 0K0P536002				Seq: 16	09:43:50 21 Nov 2000 HG					
Hg				,067	ppb	.000	,067			
*** Sample ID: MS				Seq: 17	09:45:37 21 Nov 2000 HG					
Hg			MS	1.76	ppb	.000	1.76			

09:48:02 21 Nov 2000

Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5
<hr/>									
*** Sample ID: OK0P346004					Seq: 18	09:48:02 21 Nov 2000 HG			
Hg		.042	ppb		.000	.042			
*** Check Standard: 1 Ck1					Seq: 19	09:49:47 21 Nov 2000 HG			
Line Wave. Flag	Found Range(+/-)	Units		SD/RSD					
Hg	,026	,500	ppb	,060					
*** Check Standard: 2 Ck2					Seq: 20	09:51:36 21 Nov 2000 HG			
Line Wave. Flag %Rcv.	Found	True	Units	SD/RSD					
Hg	94.7	1.89	2.00	ppb		.000			
*** Sample ID: OK0P350003					Seq: 21	09:53:29 21 Nov 2000 HG			
Hg		.059	ppb		.000	.059			
*** Sample ID: OK0P350004					Seq: 22	09:55:44 21 Nov 2000 HG			
Hg		,110	ppb		,000	,110			
*** Sample ID: MS					Seq: 23	09:57:28 21 Nov 2000 HG			
Hg		,929	ppb		,000	,929			
*** Sample ID: CBA G,5PPB					Seq: 24	09:59:43 21 Nov 2000 HG			
Hg		.475	ppb		.000	.475			
*** Sample ID: OK0P240002					Seq: 25	10:01:56 21 Nov 2000 HG			
Hg		,044	ppb		,000	,044			
*** Sample ID: OK0P240003					Seq: 26	10:03:42 21 Nov 2000 HG			
Hg		1.81	ppb		,000	1.81			
*** Sample ID: OK0P466002					Seq: 27	10:04:07 21 Nov 2000 HG			
Hg		,017	L ppb		.000	,017			
*** Sample ID: OK0P466003					Seq: 28	10:07:58 21 Nov 2000 HG			
Hg		1.76	ppb		,000	1.76			
*** Sample ID: OK0P323035					Seq: 29	10:10:15 21 Nov 2000 HG			
Hg		.041	ppb		.000	.041			

12:01 21 Nov 2000

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Protocol: WATER WATER

Line Wave, Ckec, Units SD/RSD

1 2 3 4 5

32734
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++ Sample ID: OK0P323036 Seq: 29 10:12:51 21 Nov 2000 HG

Hg 1.77 ppb .000 1.77

++ Check Standard: 1 Ck1 Seq: 31 10:14:02 21 Nov 2000 HG
Line Wave, Flag Found Range(+-) Units SD/RSD

Hg ,012 ,500 ppb ,000

++ Check Standard: 2 Ck2 Seq: 32 10:16:20 21 Nov 2000 HG
Line Wave, Flag %Rev. Found True Units SD/RSD

Hg 92.6 1.85 2.00 ppb .000

++ Sample ID: OK0P357007 Seq: 33 10:18:45 21 Nov 2000 HG

Hg .043 ppb .000 .043

++ Sample ID: OK0P357008 Seq: 34 10:20:00 21 Nov 2000 HG

Hg 1.83 ppb .000 1.83

++ Sample ID: OK0P357010 Seq: 35 10:22:54 21 Nov 2000 HG

Hg .039 ppb .000 .039

++ Sample ID: OK0P357011 Seq: 36 10:24:41 21 Nov 2000 HG

Hg 1.96 ppb MS .000 1.96

++ Sample ID: OK0P370002 Seq: 37 10:27:05 21 Nov 2000 HG

Hg .032 ppb .000 .032

++ Sample ID: OK0P370003 Seq: 38 10:28:51 21 Nov 2000 HG

Hg 1.79 ppb MS .000 1.79

++ Sample ID: PB OKOXO20203 Seq: 39 10:31:12 21 Nov 2000 HG

Hg .046 ppb PB .000 .046

++ Sample ID: LCS OKOXO20204 Seq: 40 10:32:57 21 Nov 2000 HG

Hg 1.63 ppb LCS .000 1.63

++ Sample ID: OK0P367002 Seq: 41 10:35:22 21 Nov 2000 HG

Hg .060 ppb .000 .060

10:37:11 21 Nov 2000

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Page

Line Wave, Conc. Units

SD/RSD.

1

2

3

4

5

Sample ID:	Line Wave,	Conc.	Units	SD/RSD.	Seq:	Date
OK0P367003		MS			42	10:37:11 21 Nov 2000 HG
	1.86	ppb	.000		1.86	
** Check Standard: 1 Ck1					43	10:39:35 21 Nov 2000 HG
Line Wave, Flag Found Range(+/-) Units				SD/RSD		
Hg	,005	,500	ppb	,000		
*** Check Standard: 2 Ck2					44	10:41:23 21 Nov 2000 HG
Line Wave, Flag %Rev. Found True Units				SD/RSD		
Hg	91.7	1.83	2.00 ppb	,000		
*** Sample ID: OK0P367005					45	10:43:51 21 Nov 2000 HG
Hg	,018	L ppb	.000		.018	
*** Sample ID: OK0P367007					46	10:45:36 21 Nov 2000 HG
Hg	,068	ppb	,000		,068	
*** Sample ID: OK0P367008		MS			47	10:47:24 21 Nov 2000 HG
Hg	1.91	ppb	.000		1.91	
*** Sample ID: OK0P403002					48	10:49:46 21 Nov 2000 HG
Hg	,034	ppb	.000		,034	
*** Sample ID: OK0P403003		MS			49	10:51:34 21 Nov 2000 HG
Hg	1.83	ppb	,000		1.83	
*** Sample ID: OK0P403005					50	10:53:56 21 Nov 2000 HG
Hg	,033	ppb	.000		,033	
*** Sample ID: OK0P403007					51	10:55:42 21 Nov 2000 HG
Hg	,062	ppb	.000		,062	
*** Sample ID: OK0P403002					52	10:57:28 21 Nov 2000 HG
Hg	,066	ppb	,000		,066	
*** Sample ID: OK0P403003		MS			53	10:59:15 21 Nov 2000 HG
Hg	1.80	ppb	.000		1.80	

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11:01:42 21 Nov 2000

Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5
*** Sample ID: CRA 0.5PPB				Seq:	54	11:01:42 21 Nov 2000 HG			
Hg	.460	ppb	.000		.460				
*** Check Standard: 1 Ck1				Seq:	55	11:03:54 21 Nov 2000 HG			
Line	Wave.	Flag	Found Range(+/-)	Units	SD/RSD				
Hg	.014	.500	ppb	.000					
*** Check Standard: 2 Ck2				Seq:	56	11:05:44 21 Nov 2000 HG			
Line	Wave.	Flag	%Rev.	Found	True	Units	SD/RSD		
Hg	90.1			1.80	2.00	ppb	.000		
*** Sample ID: OK0X020205				Seq:	57	11:08:10 21 Nov 2000 HG			
Hg	.022	ppb	.000		.022				
*** Sample ID: OK0X020206				Seq:	58	11:10:00 21 Nov 2000 HG			
Hg	1.70	ppb	.000		1.70				
*** Sample ID: OK0P570009				Seq:	59	11:12:33 21 Nov 2000 HG			
Hg	.020	ppb	.000		.020				
*** Sample ID: OK0X020207				Seq:	60	11:14:26 21 Nov 2000 HG			
Hg	.072	ppb	.000		.072				
*** Sample ID: OK0X020208				Seq:	61	11:16:08 21 Nov 2000 HG			
Hg	1.54	ppb	.000		1.54				
*** Sample ID: OK0X020209				Seq:	62	11:18:37 21 Nov 2000 HG			
Hg	1.68	ppb	.000		1.68				
*** Sample ID: CRA 0.5PPB				Seq:	63	11:21:09 21 Nov 2000 HG			
Hg	.469	ppb	.000		.469				
*** Check Standard: 1 Ck1				Seq:	64	11:23:17 21 Nov 2000 HG			
Line	Wave.	Flag	Found Range(+/-)	Units	SD/RSD				
Hg	.013	.500	ppb	.000					
*** Check Standard: 2 Ck2				Seq:	65	11:25:05 21 Nov 2000 HG			
Line	Wave.	Flag	%Rev.	Found	True	Units	SD/RSD		
Hg	90.5			1.81	2.00	ppb	.000		

14:55:09 27 Nov 2000

FOLIO: 11270010
PPT: WATER WATER

Line Wave, Cm., Units

ppb/PPB

1 2 3 4 5

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*** Standard: 1 Rep: 1 Seq: 0 14:55:09 27 Nov 2000 HG

Hg .000 ppb -4438
Ave. Int. = -4438 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 1 14:56:59 27 Nov 2000 HG

Hg .500 ppb 15012
Ave. Int. = 15012 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 2 14:59:22 27 Nov 2000 HG

Hg 1.00 ppb 36411
Ave. Int. = 36411 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 3 15:01:56 27 Nov 2000 HG

Hg 2.00 ppb 66791
Ave. Int. = 66791 S. D. = 0

*** Standard: 5 Rep: 1 Seq: 4 15:04:18 27 Nov 2000 HG

Hg 5.00 ppb 212265
Ave. Int. = 212265 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 5 15:07:02 27 Nov 2000 HG

Hg .200 ppb 862
Ave. Int. = 862 S. D. = 0

d

Protocol: MATER
Instrument: Williams

Rev: 0.005 Date: 15:07:00 27 Nov 2000

Folder: 1127001A

Seq: 6

Print: On

User: D.L.D.
DATER: 10-Nov-00 10:54:00 AM
Cup: 0.00 LFL

State: Idle
Macro: HgTP
7Q: F2 Point
Wait: OFF Autosequencer: On

ORIGINAL

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CALIBRATION: Line Calibration

Line: Hg Accepted

Curve: 0.100 Dev: Linear

S1 0.00 0.00 0.00 Quadratic

S2 0.500 0.543 0.443 Ut/Linear

S3 1.00 1.03 0.855

S4 2.00 2.20 1.77

S5 2.50 1.73 -0.571 Intercept 0

S6 5.00 5.00 0.777

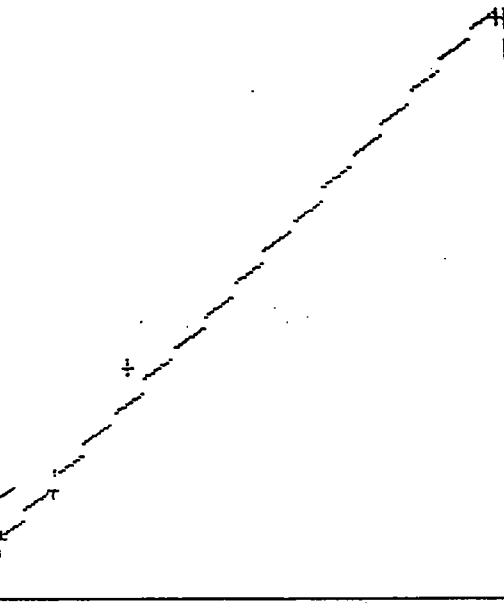
S7 5.00 5.00 0.777

S8 0.200 0.217 0.117 Standard

S9 0.0000000 X 0.997459

S10 0.0000000 X 0.997459

S11 0.0000000 X 0.997459



Dalatina Dhonkhanra
Institute of Nuclear Science

Mean	STD	Curve
-4438	0	-4438
15012	0	15012
27444	0	27444
30411	0	30411
66791	0	66791
66791	0	66791
212265	0	212265
882	0	882

New calibration coefficients stored
new calibration coefficients stored

15:08:59 27 Nov 2000

Folder: 1127001A
Protocol: WATER WATER

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Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5
<hr/>									
*** Check Standard: 2 Ck2					Seq: 6		15:08:59 27 Nov 2000 HG		
Line Wave. Flag	XRcv.	Found	True	Units		SD/RSD			
Hg		97.7	1.95	2.00 ppb		.000			
*** Check Standard: 1 Ck1					Seq: 7		15:11:26 27 Nov 2000 HG		
Line Wave. Flag		Found	Range(+/-)	Units		SD/RSD			
Hg		,135	,500	ppb		,000			
*** Sample ID: 0K0X020	254	255			Seq: 8		15:13:14 27 Nov 2000 HG		
Hg		,171	ppb		,000	,171			
*** Sample ID: 0K0X020	256	256			Seq: 9		15:14:57 27 Nov 2000 HG		
Hg		1.62	ppb		,000	1.62			
*** Sample ID: 0K0P367006				QC1	Seq: 10		15:17:30 27 Nov 2000 HG		
Hg		72.3	H ppb		,000	72.3	Dil. Weight .50000 Volume 250.00		
*** Sample ID: MD	257			LDI	Seq: 11		15:19:13 27 Nov 2000 HG		
Hg		84.7	H ppb		,000	84.7	Dil. Weight .50000 Volume 250.00		
*** Sample ID: MS	258			MS1	Seq: 12		15:20:57 27 Nov 2000 HG		
Hg		810.	H ppb		,000	810.	Dil. Weight .50000 Volume 250.00		
*** Sample ID: MSD				MSD1	Seq: 13		15:23:22 27 Nov 2000 HG		
Hg		794.	H ppb		,000	794.	Dil. Weight .50000 Volume 250.00		
*** Sample ID: 0K0X020	259			PB	Seq: 14		15:25:41 27 Nov 2000 HG		
Hg		,141	ppb		,000	,141			
*** Sample ID: 0K0X020	260			LCS	Seq: 15		15:27:26 27 Nov 2000 HG		
Hg		1.94	ppb		,000	1.94			
*** Sample ID: 0K0P428002					Seq: 16		15:29:54 27 Nov 2000 HG		
Hg		,133	ppb		,000	,133			
*** Sample ID: 0K0P428003				MS	Seq: 17		15:31:39 27 Nov 2000 HG		
Hg		1.93	ppb		,000	1.93			

15:34:14 27 Nov 2000

Folder: 1127001A
Protocol: WATER WATER

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Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5
<hr/>									
*** Check Standard: 2 Ck2				Seq:	18	15:34:14 27 Nov 2000 HG			
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg				90.9	1.82	2.00	ppb	.000	
*** Check Standard: 1 Ck1				Seq:	19	15:36:41 27 Nov 2000 HG			
Line	Wave.	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg				.114	.500	ppb	.000		
*** Sample ID: 0K0P583002				Seq:	20	15:38:28 27 Nov 2000 HG			
Hg				.175	ppb	.000	.175		
*** Sample ID: 0K0P583003				MS	Seq:	21	15:40:11 27 Nov 2000 HG		
Hg				1.77	ppb	.000	1.77		
*** Sample ID: 0K0P583005					Seq:	22	15:42:39 27 Nov 2000 HG		
Hg				.158	ppb	.000	.158		
*** Sample ID: 0K0P583006				MS	Seq:	23	15:44:22 27 Nov 2000 HG		
Hg				1.68	ppb	.000	1.68		
*** Sample ID: 0K0P583008					Seq:	24	15:46:49 27 Nov 2000 HG		
Hg				.146	ppb	.000	.146		
*** Sample ID: 0K0P583009				MS	Seq:	25	15:48:32 27 Nov 2000 HG		
Hg				1.63	ppb	.000	1.63		
*** Sample ID: 0K0P593002					Seq:	26	15:50:56 27 Nov 2000 HG		
Hg				.147	ppb	.000	.147		
*** Sample ID: 0K0P593003				MS	Seq:	27	15:52:39 27 Nov 2000 HG		
Hg				1.94	ppb	.000	1.94		
*** Sample ID: 0K0P594002					Seq:	28	15:55:02 27 Nov 2000 HG		
Hg				.169	ppb	.000	.169		
*** Sample ID: 0K0P594003				MS	Seq:	29	15:56:47 27 Nov 2000 HG		
Hg				1.77	ppb	.000	1.77		

ORIGINAL

15:

15:59:13 27 Nov 2000

Folder: 1127001A
Protocol: WATER WATER

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Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5
------	-------	-------	-------	--------	---	---	---	---	---

*** Check Standard: 2 Ck2 Seq: 30 15:59:13 27 Nov 2000 HG
 Line Wave. Flag %Rcv. Found True Units SD/RSD
 Hg 92.2 1.84 2.00 ppb .000

*** Check Standard: 1 Cki Seq: 31 16:01:39 27 Nov 2000 HG
 Line Wave. Flag Found Range(+-) Units SD/RSD
 Hg ,163 ,500 ppb ,000

*** Sample ID: 0K0X020 261 Seq: 32 16:03:34 27 Nov 2000 HG
 PB
 Hg .167 ppb .000 .167

*** Sample ID: 0K0X020 262 Seq: 33 16:05:20 27 Nov 2000 HG
 LCS
 Hg 1.84 ppb .000 1.84

*** Sample ID: 0K0P487007 Seq: 34 16:07:47 27 Nov 2000 HG
 Hg .165 ppb .000 .165

*** Sample ID: MS Seq: 35 16:09:35 27 Nov 2000 HG
 Hg 1.70 ppb .000 1.70

*** Sample ID: 0K0P487009 Seq: 36 16:12:02 27 Nov 2000 HG
 Hg .160 ppb .000 .160

*** Check Standard: 1 Cki Seq: 37 16:13:47 27 Nov 2000 HG
 Line Wave. Flag Found Range(+-) Units SD/RSD
 Hg .168 ,500 ppb ,000

*** Check Standard: 2 Ck2 Seq: 38 16:15:33 27 Nov 2000 HG
 Line Wave. Flag %Rcv. Found True Units SD/RSD
 Hg 94.4 1.89 2.00 ppb .000

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ORIGINAL

11:57:06 24 Nov 2000

Line	Waves	Cone	Units	SD/RSD	1	2	3	4	5
------	-------	------	-------	--------	---	---	---	---	---

*** Standard: 1 Rep: 1 Seq: 9 11:57:06 24 Nov 2000 HG

Hg .000 ppb -3946
Ave. Int. = -3946 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 1 11:59:11 24 Nov 2000 HG

Hg .500 ppb 11843
Ave. Int. = 11843 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 2 12:01:16 24 Nov 2000 HG

Hg 1.00 ppb 26650
Ave. Int. = 26650 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 3 12:03:24 24 Nov 2000 HG

Hg 2.00 ppb 60387
Ave. Int. = 60387 S. D. = 0

*** Standard: 5 Rep: 1 Seq: 4 12:05:45 24 Nov 2000 HG

Hg 5.00 ppb 155380
Ave. Int. = 155380 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 5 12:08:17 24 Nov 2000 HG

Hg 10.0 ppb 340723
Ave. Int. = 340723 S. D. = 0

6

Instrument: 50700 Date: 12/01/03 24 Nov 2003
 Protocol: 50700 Version:
 Folder: 11/2001A Seq: 6 Print: On
 User: DATE: 12/01/03 24 Nov 2003
 Status: Idle Macrom MCRP 79: F2 Print Ymit: OFF Autoemulsion: On
 Status: Idle

CALIBRATION: Line Calibration

Sample No.	Conc.	Cal.	Rel.	Linearity
51	.000	.000	.000	Gradiometric
52	.500	.564	.864	Wt/Linear
53	1.00	.995	.995	"
54	2.00	1.00	.997	"
55	2.00	1.99	.993	Accept
56	5.00	4.74	.963	"
57	10.0	10.1	.974	RECALL
A	.0000000	r	.999312	
B	0.0000000	b	0.0000000	
C	2.0007487	c	2.0001007	

Relative Absorbance
in relative absorbance

Mean	STD	
-3946	0	-3946
11843	0	11843
27778	0	27778
40000	0	40000
69397	0	69397
80000	0	80000
155300	0	155300
348723	0	348723

New calibration coefficients stored
new calibration coefficients stored

12:10:57 24 Nov 2000

Faidher: 11240001A
Protocol: WATER WATER

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Line Wave, Concentration Units 60/650 + 2 3 4 5

*** Check Standard: 2 Ckz Seq: 6 12:10:57 24 Nov 2000 HG
 Line Wave, Flag %Rcv. Found True Units SD/RSD
 Hg 103. 2.07 2.00 ppb .000

*** Check Standard: 1 Ckz Seq: 7 12:13:24 24 Nov 2000 HG
 Line Wave, Flag Found Range(+/-) Units SD/RSD
 Hg .068 .000 ppb .000

*** Sample ID: CRA 1.0PPB Seq: 8 12:15:19 24 Nov 2000 HG

Hg 1.00 ppb .000 1.00

*** Sample ID: 0K0X029³⁴ S Seq: 9 12:17:32 24 Nov 2000 HG
 PB 25.9 H ppb .000 25.9 Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0X029 24¹⁶ Seq: 10 12:18:18 24 Nov 2000 HG
 LCS 748. H ppb .000 748. Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310002 Seq: 11 12:21:45 24 Nov 2000 HG
 Hg 117. H ppb .000 117. Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310003 Seq: 12 12:23:58 24 Nov 2000 HG
 Hg 301. H ppb .000 301. Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310004 Seq: 13 12:26:03 24 Nov 2000 HG
 Hg 154. H ppb .000 154. Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310012 Seq: 14 12:28:08 24 Nov 2000 HG
 Hg 158. H ppb .000 158. Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310013 Seq: 15 12:30:18 24 Nov 2000 HG
 Hg 75.7 H ppb .000 75.7 Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310014 Seq: 16 12:32:22 24 Nov 2000 HG
 Hg 123. H ppb .000 123. Dil. Weight .60000 Volume 100.00

*** Sample ID: 0K0P310015 Seq: 17 12:34:29 24 Nov 2000 HG
 Hg 124. H ppb .000 124. Dil. Weight .60000 Volume 100.00

12:36:34 24 Nov 2000

Folder: 1124001A
Protocol: WATER WATER

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Line Wave, Conc. Units : SD/RSD 1 2 3 4 5

*** Check Standard: 2 CH2 Seq: 18 12:36:34 24 Nov 2000 HG
 Line Wave, Flag ZRcv. Found True Units SD/RSD
 Hg 109. 2.18 2.00 ppb .000

*** Check Standard: 1 CH1 Seq: 19 12:36:36 24 Nov 2000 HG
 Line Wave, Flag Found Range(+/-) Units SD/RSD
 Hg .132 .500 ppb .000

*** Sample ID: OK0P310016 Seq: 20 12:40:51 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 385. H ppb .000 385.

*** Sample ID: OK0P367001 Seq: 21 12:43:05 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 111. H ppb .000 111.

*** Sample ID: OK0P367004 Seq: 22 12:43:09 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 103. H ppb .000 103.

*** Sample ID: OK0P367006 Seq: 23 12:47:13 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 24.5 H ppb .000 24.5

*** Sample ID: OK0P367009 Seq: 24 12:48:59 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 924. H ppt .000 924.

*** Sample ID: OK0P367011 Seq: 25 12:51:17 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 137. H ppb .000 137.

*** Sample ID: OK0P617001 Seq: 26 12:53:21 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 205. H ppb .000 205.

*** Sample ID: OK0P617002 Seq: 27 12:55:36 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 48.2 H ppb .000 48.2

*** Sample ID: OK0P617003 Seq: 28 12:57:23 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 54.5 H ppb .000 54.5

*** Sample ID: OK0P617004 Seq: 29 12:59:08 24 Nov 2000 HG
 Dil. Weight .60000 Volume 100.00
 Hg 51.0 H ppb .000 51.0

Original

JC

13:00:57 24 Nov 2000

Line Wave, Conc. Units SD/RSD 1 2 3 4 5

*** Check Standard: 2 Ck2 Seq: 20 13:00:57 24 Nov 2000 HG
Line Wave, Flag %Rcv. Found True Units SD/RSD JCZ
Hg R 117. 2.34 2.00 ppb .000

*** Standard: 1 Rep: 1 Seq: 21 13:02:54 24 Nov 2000 HG
Hg .000 ppb 0
Ave. Int. = 0 S. D. = 0

*** Standard: 2 Rep: 1 Seq: 22 13:04:42 24 Nov 2000 HG
Hg .500 ppb 16273
Ave. Int. = 16273 S. D. = 0

*** Standard: 3 Rep: 1 Seq: 23 13:06:50 24 Nov 2000 HG
Hg 1.00 ppb 33174
Ave. Int. = 33174 S. D. = 0

*** Standard: 4 Rep: 1 Seq: 24 13:08:09 24 Nov 2000 HG
Hg 2.00 ppb 72101
Ave. Int. = 72101 S. D. = 0

*** Standard: 5 Rep: 1 Seq: 25 13:11:28 24 Nov 2000 HG
Hg 5.00 ppb 180666
Ave. Int. = 180666 S. D. = 0

*** Standard: 6 Rep: 1 Seq: 26 13:13:59 24 Nov 2000 HG
Hg 10.0 ppb 363728
Ave. Int. = 363728 S. D. = 0

d

ENTERTAINMENT WEEKLY 115729
ENTERTAINMENT WEEKLY 115729

Rev 2.000 File 10114155 26 Nov 2000

Print: Un

Folder: 1149001A Seq: 37

11. **STUDY** **1** **100** **100**
12. **STUDY** **1** **100** **100**

Stata: Idea Macroeconomics
Model WCFP
70: F2 Point Yield: Off Autocorrelation: On

CALIBRATIONS: LIQUIDS AND GASES

CALIBRATION: Line Calibration

Line 11
Accented

Digitized by srujanika@gmail.com

	NAME	AMOUNT	
81		\$	\$
82		-	-
83	15273	50 00	15273
84	30474	50 00	30474
85	30114	50 00	30114
86	72181	50 00	72181
87	12181	-	12181
88	180666	\$	180666
89		-	-
90	363728	50 00	363728

~~Non calibration coefficients stored
in new variables loc1 loc2 loc3 loc4~~

Line	Wave.	Conc.	Units	SD/RSD	1	2	3	4	5
*** Check Standard: 2 Ck2				Seq: 49	13:41:38 24 Nov 2000 HG				
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg				104.	2.08	2.00	ppb	.000	
*** Check Standard: 1 Ck1				Seq: 50	13:43:37 24 Nov 2000 HG				
Line	Wave.	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg				-.058	.500	ppb	.000		
*** Sample ID: OK0P617005				Seq: 51	13:45:51 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		66.9			
*** Sample ID: OK0P617006				Seq: 52	13:47:49 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		18.9			
*** Sample ID: OK0P649001				Seq: 53	13:49:35 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		23.6			
*** Sample ID: OK0P649002				Seq: 54	13:51:22 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		23.3			
*** Sample ID: OK0P649003				Seq: 55	13:53:16 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		72.6			
*** Sample ID: OK0X020 247/251	PB			Seq: 56	13:55:28 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			L ppb	.000		-16.3			
*** Sample ID: OK0X020 248/252	LCS			Seq: 57	13:57:17 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		734.			
*** Sample ID: OK0P649004				Seq: 58	13:59:42 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		23.6			
*** Sample ID: OK0P649005				Seq: 59	14:01:31 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			H ppb	.000		23.1			
*** Sample ID: OK0P649006				Seq: 60	14:03:21 24 Nov 2000 HG				
Hg					Dil. Weight	.60000	Volums	100.00	
Hg			L ppb	.000		-.817			

Falderat 1124001A
Protocol: WATER WATER

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14:05:11 24 May 2000

Protocol: WATER WATER

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Line	Wave.	Conc.	Units	SD/RSD	i	2	3	4	5
*** Check Standard: 2	Ck2				Seq: 61	14:05:11	24 Nov 2000	HG	
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg				107.	2.14	2.00	ppb	.000	
*** Check Standard: 1	Ck1				Seq: 62	14:07:31	24 Nov 2000	HG	
Line	Wave.	Flag	Found	Range(+/-)	True	Units	SD/RSD		
Hg				-.066	.500	ppb	.000		
*** Sample ID: OK0PS40002					Seq: 63	14:09:28	24 Nov 2000	HG	
Hg		20.0	H	ppb	.000	30.0	Dil. Weight	.60000	Volume 100.0
*** Sample ID: OK0PS40003					Seq: 64	14:11:17	24 Nov 2000	HG	
Hg		22.6	H	ppb	.000	22.6	Dil. Weight	.60000	Volume 100.0
*** Sample ID: OK0PS40005					Seq: 65	14:13:06	24 Nov 2000	HG	
Hg		7.47	H	ppb	.000	7.47	Dil. Weight	.60000	Volume 100.0
*** Sample ID: OK0PS40007					Seq: 66	14:14:54	24 Nov 2000	HG	
Hg		28.2	H	ppb	.000	28.2	Dil. Weight	.60000	Volume 100.0
*** Sample ID: OK0PS40008					Seq: 67	14:16:42	24 Nov 2000	HG	
Hg		15.8	H	ppb	.000	15.8	Dil. Weight	.60000	Volume 100.0
*** Sample ID: OK0PS40012					Seq: 68	14:18:31	24 Nov 2000	HG	
Hg		22.6	H	ppb	.000	22.6	Dil. Weight	.60000	Volume 100.0
*** Sample ID: MD OK0X020249				QC1	Seq: 69	14:20:20	24 Nov 2000	HG	
Hg		16.7	H	ppb	.000	16.7	Dil. Weight	.60000	Volume 100.0
*** Sample ID: MS OK0X02025D				MS1	Seq: 70	14:22:08	24 Nov 2000	HG	
Hg		739.	H	ppb	.000	739.	Dil. Weight	.60000	Volume 100.0
*** Sample ID: MS0				MSD1	Seq: 71	14:24:29	24 Nov 2000	HG	
Hg		760.	H	ppb	.000	760.	Dil. Weight	.60000	Volume 100.0
*** Sample ID: OK0P486002					Seq: 72	14:26:56	24 Nov 2000	HG	
Hg		85.1	H	ppb	.000	85.1	Dil. Weight	.60000	Volume 100.0

14:29:04 24 Nov 2000

Folder: 1124001A
Protocol: WATER WATER

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Line	Wave.	Cone.	Units	SD/RSD	1	2	3	4	5
<hr/>									
*** Check Standard: 2 Ck2 Seq: 73 14:29:04 24 Nov 2000 HG									
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg				107.	2.14	2.00 ppb	.000		
<hr/>									
*** Check Standard: i Cki Seq: 74 14:31:24 24 Nov 2000 HG									
Line	Wave.	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg				-.027	.500	ppb	.000		
<hr/>									
*** Sample ID: EK0P593001 Seq: 75 14:33:21 24 Nov 2000 HG									
Hg					Dil. Weight	.60000 Volume	100.00		
	29.1	H	ppb	.000	29.1				
<hr/>									
*** Sample ID: EK0P594001 Seq: 76 14:35:18 24 Nov 2000 HG									
Hg					Dil. Weight	.60000 Volume	100.00		
	48.7	H	ppb	.000	48.7				
<hr/>									
*** Sample ID: EK0P521001 Seq: 77 14:37:14 24 Nov 2000 HG									
Hg					Dil. Weight	.60000 Volume	100.00		
	34.3	H	ppb	.000	34.3				
<hr/>									
*** Sample ID: EK0P621002 Seq: 78 14:39:10 24 Nov 2000 HG									
Hg					Dil. Weight	.60000 Volume	100.00		
	26.9	H	ppb	.000	26.9				
<hr/>									
*** Sample ID: EK0P621003 Seq: 79 14:41:01 24 Nov 2000 HG									
Hg					Dil. Weight	.60000 Volume	100.00		
	18.6	H	ppb	.000	18.6				
<hr/>									
*** Sample ID: CRA i,0PPB Seq: 80 14:42:58 24 Nov 2000 HG									
Hg									
	1.00	ppb		.000	1.00				
<hr/>									
*** Check Standard: 1 Ck1 Seq: 81 14:45:07 24 Nov 2000 HG									
Line	Wave.	Flag	Found	Range(+/-)	Units	SD/RSD			
Hg				-.037	.500	ppb	.000		
<hr/>									
*** Check Standard: 2 Ck2 Seq: 82 14:47:08 24 Nov 2000 HG									
Line	Wave.	Flag	%Rcv.	Found	True	Units	SD/RSD		
Hg				106.	2.12	2.00 ppb	.000		

FORM 6
VOLATILE INITIAL CALIBRATION DATA

166

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: ICAL Case No.: SAS No.: SDG No.: J062A

Instrument ID: MSD2 Calibration Date(s): 10/06/0 10/06/0

Column: OV-624 ID: 0.53 (mm) Calibration Time(s): 1219 1629

LAB FILE ID: RF25: J062A0201002RF50: J062A0301003RF125: J062A040100
RF250: J062A050100RF500: J062A060100

COMPOUND	RF25	RF50	RF125	RF250	RF500
CHLOROMETHANE spcc	0.195	0.154	0.162	0.148	0.148
VINYL CHLORIDE CCC	0.249	0.167	0.210	0.200	0.201
BROMOMETHANE	0.233	0.305	0.278	0.247	0.235
CHLOROETHANE	0.147	0.112	0.124	0.125	0.146
1 1-DICHLOROETHENE CCC	0.398	0.311	0.327	0.306	0.311
METHYLENE CHLORIDE	0.291	0.274	0.289	0.280	0.290
trans-1 2-DICHLOROETHENE	0.367	0.381	0.307	0.328	0.325
1,1-DICHLOROETHANE spcc	0.795	0.689	0.670	0.655	0.676
cis-1 2-DICHLOROETHENE	0.366	0.402	0.380	0.317	0.328
CHLOROFORM CCC	1.142	1.041	1.081	0.916	0.949
1 1 1-TRICHLOROETHANE	1.183	1.287	1.191	1.044	1.014
CARBON TETRACHLORIDE	0.976	1.023	1.145	0.946	0.886
BENZENE	0.918	1.046	0.929	0.855	0.826
1 2-DICHLOROETHANE	0.847	0.802	0.913	0.772	0.769
TRICHLOROETHENE	0.517	0.444	0.569	0.542	0.532
1,2-DICHLOROPROPANE CCC	0.288	0.344	0.254	0.252	0.278
BROMODICHLOROMETHANE	0.882	0.897	0.962	0.821	0.836
TOLUENE CCC	0.851	0.775	0.648	0.690	0.678
1 1 2-TRICHLOROETHANE	0.441	0.325	0.392	0.385	0.380
TETRACHLOROETHENE	0.790	0.775	0.786	0.816	0.808
DIBROMOCHLOROMETHANE	0.909	0.864	0.976	1.126	1.054
CHLOROBENZENE spcc	1.148	0.922	0.997	1.038	1.079
ETHYLBENZENE CCC	1.891	1.548	1.742	1.810	1.747
m/p-XYLENE	0.524	0.543	0.563	0.593	0.616
o-XYLENE	0.667	0.441	0.541	0.586	0.551
STYRENE	0.907	0.728	0.867	0.910	0.882
BROMOFORM spcc	0.776	0.724	0.828	0.824	0.842
1 1 2-TETRACHLOROETHANE sp	0.915	0.777	0.906	0.856	0.952
ACETONE	0.186	0.164	0.133	0.114	0.108
CARBON DISULFIDE	0.798	0.752	0.722	0.619	0.690
METHYL ETHYL KETONE	0.384	0.346	0.353	0.326	0.321
2-HEXANONE		0.275	0.266	0.230	0.274
cis-1,3-DICHLOROPROPENE	0.562	0.524	0.557	0.492	0.508
4-METHYL-2-PENTANONE		0.383	0.385	0.357	0.347
trans-1,3 DICHLOROPROPENE	0.694	0.623	0.669	0.674	0.702
Total Xylenes	0.572	0.509	0.556	0.591	0.594
1,2-DICHLOROETHENE (TOTAL)	0.366	0.391	0.344	0.322	0.327

FORM 6
VOLATILE INITIAL CALIBRATION DATA

167

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: ICAL Case No.: SAS No.: SDG No.: J062A

Instrument ID: MSD2 Calibration Date(s): 10/06/0 10/06/0

Column: OV-624 ID: 0.53 (mm) Calibration Time(s): 1219 1629

LAB FILE ID: RF750: RF1000: J062A08010

COMPOUND	RF750	RF1000
CHLOROMETHANE spcc		0.124
VINYL CHLORIDE ccc		0.180
BROMOMETHANE		
CHLOROETHANE		0.116
1 1-DICHLOROETHENE ccc		0.283
METHYLENE CHLORIDE		0.271
trans-1 2-DICHLOROETHENE		0.317
1,1-DICHLOROETHANE spcc		0.601
cis-1 2-DICHLOROETHENE		0.311
CHLOROFORM ccc		0.853
1 1 1-TRICHLOROETHANE		0.888
CARBON TETRACHLORIDE		0.744
BENZENE		0.860
1 2-DICHLOROETHANE		0.681
TRICHLOROETHENE		0.492
1,2-DICHLOROPROPANE ccc		0.282
BROMODICHLOROMETHANE		0.700
TOLUENE ccc		0.751
1 1 2-TRICHLOROETHANE		0.392
TETRAZCHLOROETHENE		0.887
DIBROMOCHLOROMETHANE		1.008
CHLOROBENZENE spcc		1.003
ETHYLBENZENE ccc		1.720
m/p-XYLENE		0.581
o-XYLENE		0.517
STYRENE		0.867
BROMOFORM spcc		0.776
1 1 2-TETRACHLOROETHANE sp		0.890
ACETONE		
CARBON DISULFIDE		0.656
METHYL ETHYL KETONE		0.261
2-HEXANONE		0.194
cis-1,3-DICHLOROPROPENE		0.468
4-METHYL-2-PENTANONE		0.264
trans-1,3 DICHLOROPROPENE		0.750
Total Xylenes		0.560
1,2-DICHLOROETHENE (TOTAL)		0.314

FORM 6
VOLATILE INITIAL CALIBRATION DATA

163

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: ICAL Case No.: SAS No.: SDG No.: J062A

Instrument ID: MSD2 Calibration Date(s): 10/06/0 10/06/0

Column: OV-624 ID: 0.53 (mm) Calibration Time(s): 1219 1629

LAB FILE ID: RF25: J062A0201002RF50: J062A0301003RF125: J062A040100
RF250: J062A050100RF500: J062A060100

COMPOUND	RF25	RF50	RF125	RF250	RF500
1,2-DICHLOROETHANE d-4	0.745	0.590	0.778	0.648	0.678
TOLUENE d-8	1.059	1.093	1.138	1.231	1.247
p-BROMOFLUOROBENZENE	1.550	1.315	1.435	1.508	1.634

FORM 6
VOLATILE INITIAL CALIBRATION DATA

169
Calibration

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: ICAL Case No.: SAS No.: SDG No.: J062A

Instrument ID: MSD2 Calibration Date(s): 10/06/0 10/06/0

Column: OV-624 ID: 0.53 (mm) Calibration Time(s): 1219 1629

LAB FILE ID: RF750: RF1000: J062A08010

COMPOUND	RF750	RF1000
1, 2 - DICHLOROETHANE d-4		0.555
TOLUENE d-8		1.290
p-BROMOFLUOROBENZENE		1.553

FORM 6
VOLATILE INITIAL CALIBRATION DATA

170

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: ICAL Case No.: SAS No.: SDG No.: J062A

Instrument ID: MSD2 Calibration Date(s): 10/06/0 10/06/0

Column: OV-624 ID: 0.53 (mm) Calibration Time(s): 1219 1629

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
CHLOROMETHANE spcc	AVRG	0.15540558		14.8
VINYL CHLORIDE ccc	AVRG	0.20128372		14.1
BROMOMETHANE	AVRG	0.25962651		12.0
CHLOROETHANE	AVRG	0.12813837		11.7
1 1-DICHLOROETHENE CCC	AVRG	0.32278224		12.2
METHYLENE CHLORIDE	AVRG	0.28253132		3.1
trans-1 2-DICHLOROETHENE	AVRG	0.33753601		8.7
1,1-DICHLOROETHANE spcc	AVRG	0.68109264		9.3
cis-1 2-DICHLOROETHENE	AVRG	0.35064185		10.6
CHLOROFORM CCC	AVRG	0.99690028		10.9
1 1 1-TRICHLOROETHANE	AVRG	1.10130505		13.2
CARBON TETRACHLORIDE	AVRG	0.95338332		14.1
BENZENE	AVRG	0.90568690		8.7
1 2-DICHLOROETHANE	AVRG	0.79728369		9.9
TRICHLOROETHENE	AVRG	0.51607568		8.5
1,2-DICHLOROPROPANE CCC	AVRG	0.28293313		11.8
BROMODICHLOROMETHANE	AVRG	0.84980042		10.4
TOLUENE CCC	AVRG	0.73226168		10.2
1 1 2-TRICHLOROETHANE	AVRG	0.38591617		9.7
TETRACHLOROETHENE	AVRG	0.81041575		5.0
DIBROMOCHLOROMETHANE	AVRG	0.98949684		9.6
CHLOROBENZENE spcc	AVRG	1.03123260		7.5
ETHYLBENZENE CCC	AVRG	1.74297366		6.5
m/p-XYLENE	AVRG	0.57015937		5.9
o-XYLENE	AVRG	0.55035561		13.6
STYRENE	AVRG	0.86009534		7.8
BROMOFORM spcc	AVRG	0.79480461		5.6
1 1 2 2-TETRACHLOROETHANE sp	AVRG	0.88264988		6.9
ACETONE	LINR	-0.1160919	9.78391229	0.999
CARBON DISULFIDE	AVRG	0.70615585		9.2
METHYL ETHYL KETONE	AVRG	0.33177429		12.5
2-HEXANONE	AVRG	0.24763542		14.2
cis-1,3-DICHLOROPROPENE	AVRG	0.51861046		7.0
4-METHYL-2-PENTANONE	AVRG	0.34726108		14.3
trans-1,3 DICHLOROPROPENE	AVRG	0.68548971		6.1
Total Xylenes	AVRG	0.56355812		5.5
1,2-DICHLOROETHENE (TOTAL)	AVRG	0.34408893		8.6

FORM 6
VOLATILE INITIAL CALIBRATION DATA

171

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: ICAL Case No.: SAS No.: SDG No.: J062A

Instrument ID: MSD2 Calibration Date(s): 10/06/0 10/06/0

Column: OV-624 ID: 0.53 (mm) Calibration Time(s): 1219 1629

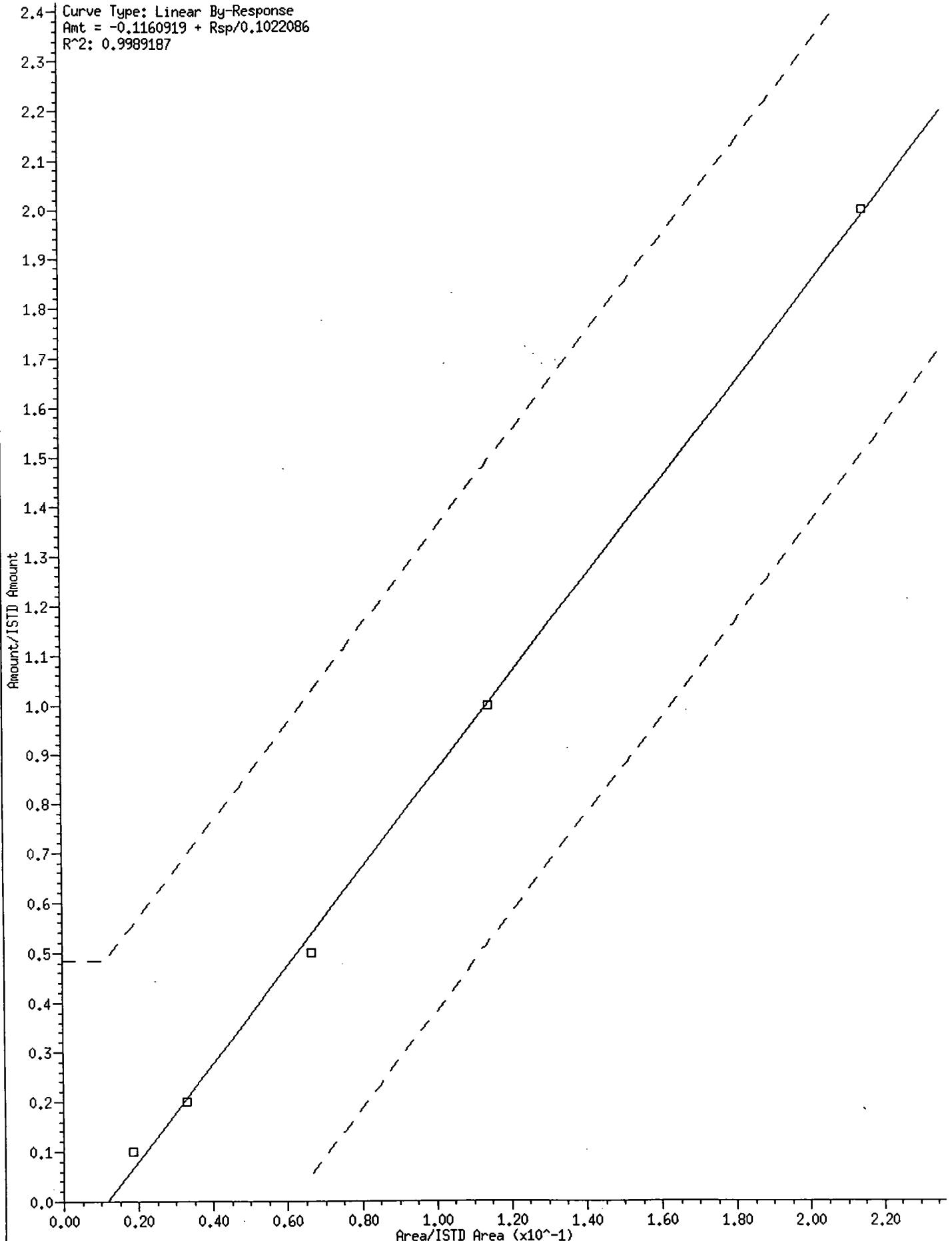
Original

COMPOUND	CURVE	COEFFICIENTS		%RSD OR R^2
		A0	A1	
1, 2-DICHLOROETHANE d-4	AVRG		0.66575326	13.0
TOLUENE d-8	AVRG		1.17644757	7.9
p-BROMOFLUOROBENZENE	AVRG		1.49926391	7.4

172

21 ACETONE

Curve Type: Linear By-Response
Amt = -0.1160919 + Rsp/0.1022086
 R^2 : 0.9989187



7A
VOLATILE CONTINUING CALIBRATION CHECK

1M3

Calibration

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K132A

Instrument ID: MSD2 Calibration Date: 11/13/0 Time: 0920

Lab File ID: K132A0201002 Init. Calib. Date(s): 10/06/0 10/06/0

Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629

GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	CAL250 AMOUNT	CURVE	%D	MAX %d
CHLOROMETHANE spcc	250	250	AVRG	0.0	20.0
VINYL CHLORIDE ccc	228	250	AVRG	8.8	20.0
BROMOMETHANE	274	250	AVRG	-9.6	20.0
CHLOROETHANE	260	250	AVRG	-4.0	20.0
1 1-DICHLOROETHENE ccc	244	250	AVRG	2.4	20.0
METHYLENE CHLORIDE	229	250	AVRG	8.4	20.0
trans-1 2-DICHLOROETHENE	248	250	AVRG	0.8	20.0
1,1-DICHLOROETHANE spcc	220	250	AVRG	12.0	20.0
cis-1 2-DICHLOROETHENE	238	250	AVRG	4.8	20.0
CHLOROFORM ccc	217	250	AVRG	13.2	20.0
1 1 1-TRICHLOROETHANE	216	250	AVRG	13.6	20.0
CARBON TETRACHLORIDE	268	250	AVRG	-7.2	20.0
BENZENE	218	250	AVRG	12.8	20.0
1 2-DICHLOROETHANE	214	250	AVRG	14.4	20.0
TRICHLOROETHENE	258	250	AVRG	-3.2	20.0
1,2-DICHLOROPROPANE ccc	265	250	AVRG	-6.0	20.0
BROMODICHLOROMETHANE	263	250	AVRG	-5.2	20.0
TOLUENE ccc	214	250	AVRG	14.4	20.0
1 1 2-TRICHLOROETHANE	211	250	AVRG	15.6	20.0
TETRACHLOROETHENE	264	250	AVRG	-5.6	20.0
DIBROMOCHLOROMETHANE	250	250	AVRG	0.0	20.0
CHLOROBENZENE spcc	228	250	AVRG	8.8	20.0
ETHYLBENZENE ccc	210	250	AVRG	16.0	20.0
m/p-XYLENE	459	500	AVRG	8.2	20.0
o-XYLENE	226	250	AVRG	9.6	20.0
STYRENE	218	250	AVRG	12.8	20.0
BROMOFORM spcc	299	250	AVRG	-19.6	20.0
1 1 2-TETRACHLOROETHANE sp	215	250	AVRG	14.0	20.0
ACETONE	337	250	LINR	-34.8	20.0
CARBON DISULFIDE	227	250	AVRG	9.2	20.0
METHYL ETHYL KETONE	212	250	AVRG	15.2	20.0
2-HEXANONE	222	250	AVRG	11.2	20.0
cis-1,3-DICHLOROPROPENE	245	250	AVRG	2.0	20.0
4-METHYL-2-PENTANONE	275	250	AVRG	-10.0	20.0
trans-1,3-DICHLOROPROPENE	210	250	AVRG	16.0	20.0
Total Xylenes	685	750	AVRG	8.7	20.0
1,2-DICHLOROETHENE (TOTAL)	485	500	AVRG	3.0	20.0

7A
VOLATILE CONTINUING CALIBRATION CHECK

174

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN
Lab Code: K0P367 Case No.: SAS No.: SDG No.: K132A
Instrument ID: MSD2 Calibration Date: 11/13/0 Time: 0920
Lab File ID: K132A0201002 Init. Calib. Date(s): 10/06/0 10/06/0
Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629
GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	CAL250 AMOUNT	CURVE	%D	MAX %d
1,2-DICHLOROETHANE d-4	213	250	AVRG	14.8	20.0
TOLUENE d-8	216	250	AVRG	13.6	20.0
p-BROMOFLUOROBENZENE	225	250	AVRG	10.0	20.0

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

175

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

KX010-180

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K132A

Lab File ID: K132A0501005A Lab Sample ID: OKOX010180

Date Analyzed: 11/13/0 Time Analyzed: 1123

GC Column: OV-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: MSD2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	KX010-180MS	OKOX010178	K132A0301003	1001
02	KP367-01	OKOP367001	K132A1401014	1739
03	KP367-04	OKOP367004	K132A1501015	1820
04	KP367-06	OKOP367006	K132A1601016	1903
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COMMENTS:

CT&E Environmental Services Inc

VOLATILE ISTD AND RATIO REPORT

Data file : /orgdata/VOA.msd/msd2.i/K132A.b/K132A0501005A.d
Lab Smp Id: 0K0X010180 Client Smp ID: KX010-180
Inj Date : 13-NOV-2000 11:23
Operator : PAC Inst ID: msd2.i
Smp Info : KX010-180
Misc Info :
Comment : VOLATILE CAPILLARY METHOD
Method : /orgdata/VOA.msd/msd2.i/K132A.b/8260_5mlH20.m
Meth Date : 09-Jan-2001 13:14 mam Quant Type: ISTD
Cal Date : 06-OCT-2000 16:29 Cal File: J062A0801008.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOATCL8260.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: ctegc1

Concentration Formula: Amt * DF * (100*Vt) / (Ws*Va*S)

Name	Value	Description
DF	1.000	Dilution Factor
S	100.000	% solid
Vt	10.000	volume final ext+sur
Ws	4.000	Weight of sample extracted (g)
Va	0.200	vol of aliq. ext.

CONCENTRATIONS

RT	EXP RT (REL RT)	MASS	RESPONSE (ng)	ON-COL	FINAL	TARGET RANGE	RATIO
				(ug/Kg)	(ug/Kg)		
<hr/>							
*	1 FLUOROBENZENE			CAS #:	462-06-6		
13.023	13.009 (1.000)	96	3957256	250.000	80.00- 120.00	100.00	
13.038	13.009 (1.000)	70	890856		20.30- 30.46	22.51	
13.023	13.009 (1.000)	95	366211		7.62- 11.43	9.25	
<hr/>							
*	2 CHLOROBENZENE-d5			CAS #:	3114-55-4		
22.072	22.057 (1.000)	117	3684168	250.000	80.00- 120.00	100.00(M)	
22.057	22.057 (0.999)	119	1304022		25.10- 37.65	35.40	
22.028	22.057 (0.998)	82	2439543		12.55- 18.83	66.22	
<hr/>							
*	3 1 2-DICHLOROBENZENE d4			CAS #:	2199-69-1		
28.474	28.468 (1.000)	152	2622434	250.000	80.00- 120.00	100.00(Q)	
28.488	28.468 (1.000)	115	1753752		77.01- 115.51	66.87	

Ottawa

RT	EXP RT	(REL RT)	MASS	CONCENTRATIONS		TARGET RANGE	RATIO
				ON-COL	FINAL		
==	=====	=====	====	=====	=====	=====	=====
* 3 1,2-DICHLOROBENZENE d4 (continued)							
28.474	28.468	(1.000)	150	4186658		177.80-	266.70

\$ 5 1,2-DICHLOROETHANE d-4					CAS #: 17060-07-0		
12.267	12.251	(0.942)	65	2406714	228.379	2850	80.00- 120.00
12.267	12.251	(0.942)	102	237949		0.00-	0.00

\$ 7 TOLUENE d-8					CAS #: 2037-26-5		
17.372	17.366	(0.787)	98	3824709	220.611	2760	80.00- 120.00
17.358	17.366	(0.786)	100	2153874		.50.23-	75.34
17.387	17.366	(0.788)	70	547837		0.03-	0.04

\$ 8 p-BROMOFLUOROBENZENE					CAS #: 460-00-4		
25.580	25.584	(0.898)	95	3546767	225.523	2820	80.00- 120.00
25.580	25.584	(0.898)	174	3577439		58.92-	88.38
25.580	25.584	(0.898)	176	3706270		0.02-	0.02

QC Flag Legend

Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

CT&E Environmental Services Inc

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd2.i Calibration Date: 13-NOV-2000
Lab File ID: K132A0501005A.d Calibration Time: 09:20
Lab Smp Id: OK0X010180 Client Smp ID: KX010-180
Analysis Type: VOA Level: MED
Quant Type: ISTD Sample Type: SOIL
Operator: PAC
Method File: /orgdata/VOA.msd/msd2.i/K132A.b/8260_5mlH20.m
Misc Info:

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	4324520	2162260	8649040	3957256	-8.49
2 CHLOROBENZENE-d5	4190491	2095246	8380982	3684168	-12.08
3 1 2-DICHLOROBENZE	3008238	1504119	6016476	2622434	-12.82

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	12.99	12.49	13.49	13.02	0.23
2 CHLOROBENZENE-d5	22.01	21.51	22.51	22.07	0.27
3 1 2-DICHLOROBENZE	28.44	27.94	28.94	28.47	0.11

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

CT&E Environmental Services Inc

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: OK0X010180
Level: MED
Data Type: MS DATA
SpikeList File: Collcs.spk
Sublist File: VOATCL8260.sub
Method File: /orgdata/VOA.msd/msd2.i/K132A.b/8260_5mlH20.m
Misc Info:

Client SDG: K132A
Fraction: VOA
Client Smp ID: KX010-180
Operator: PAC
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 5 1,2-DICHLOROETHANE	3120	2850	91.35	70-121
\$ 7 TOLUENE d-8	3120	2760	88.24	81-117
\$ 8 p-BROMOFLUOROBENZE	3120	2820	90.21	74-121

CT&E Environmental Services Inc

TARGET COMPOUNDS

Client Name:
Lab Smp Id: OK0X010180
Sample Location:
Sample Date:
Sample Matrix: SOIL
Analysis Type: VOA
Data Type: MS DATA
Misc Info:

Client SDG: K132A
Client Smp ID: KX010-180
Sample Point:
Date Received:
Quant Type: ISTD
Level: MED
Operator: PAC

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
---------	----------	---	-------	---

17060-07-0-----	1,2-DICHLOROETHANE d-4		2850	
2037-26-5-----	TOLUENE d-8		2760	
460-00-4-----	p-BROMOFLUOROBENZENE		2820	

1

Data File: /orgdata/VOA.msd/msd2.i/K132A.b/K132A0501005A.d

→ Date : 13-NOV-2000 11:23

Client ID: KX010-180

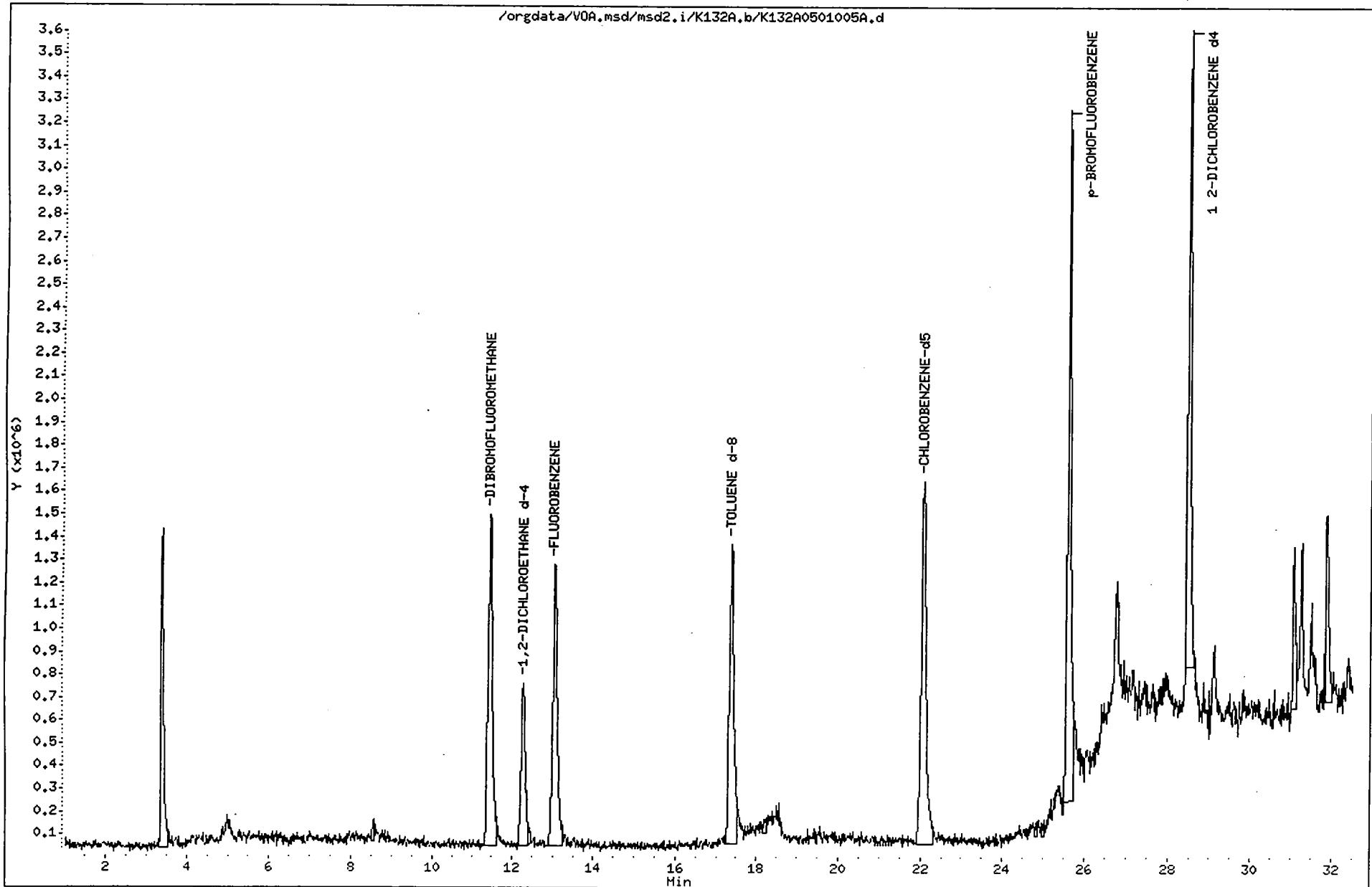
Sample Info: KX010-180

Column phase: OV-624

Instrument: msd2.i

Operator: PAC

Column diameter: 0.53



SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K132A

Matrix Spike - EPA Sample No.: KX010-180 Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1 1-DICHLOROETHENE CCC	1560	0.000	1280	82	75-125
BENZENE	1560	0.000	1400	90	75-125
TRICHLOROETHENE	1560	0.000	1680	108	75-125
TOLUENE CCC	1560	0.000	1370	88	75-125
CHLOROBENZENE spcc	1560	0.000	1530	98	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

LCS

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

183

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K132A

Level: (low/med) MED

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	OTHER	TOT OUT
01	KX010-180MS	81	90	90	_____	0
02	KX010-180	91	88	90	_____	0
03	KP367-01	100	104	87	_____	0
04	KP367-04	98	108	83	_____	0
05	KP367-06	100	109	92	_____	0
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QC LIMITS

SMC1 = 1,2-DICHLOROETHANE d-4 (70-121)
 SMC2 = TOLUENE d-8 (81-117)
 SMC3 = p-BROMOFLUOROBENZENE (74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

184

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K132A

Lab File ID (Standard): K132A0201002 Date Analyzed: 11/13/0

Instrument ID: MSD2 Time Analyzed: 0920

GC Column: OV-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4324520	12.99	4190491	22.01	3008238	28.44
UPPER LIMIT	8649040	13.49	8380982	22.51	6016476	28.94
LOWER LIMIT	2162260	12.49	2095246	21.51	1504119	27.94
EPA SAMPLE NO.						
01 KX010-180MS	3830619	13.00	3744363	22.01	2943180	28.46
02 KX010-180	3957256	13.02	3684168	22.07	2622434	28.47
03 KP367-01	3488254	13.04	2791451	22.08	2068379	28.49
04 KP367-04	3288676	13.04	2585136	22.10	1930944	28.49
05 KP367-06	3056094	13.02	2719261	22.07	1919234	28.49
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17						
18						
19						
20						
21						
22						

IS1 = FLUOROBENZENE

IS2 (CBZ) = CHLOROBENZENE-d5

IS3 = 1,2-DICHLOROBENZENE d4

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.

* Values outside of QC limits.

7A
VOLATILE CONTINUING CALIBRATION CHECK

185

Original

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Instrument ID: MSD2 Calibration Date: 11/14/0 Time: 0802

Lab File ID: K142A0201002 Init. Calib. Date(s): 10/06/0 10/06/0

Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629

GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	CAL250 AMOUNT	CURVE	%D	MAX %d
CHLOROMETHANE spcc	214	250	AVRG	14.4	20.0
VINYL CHLORIDE CCC	215	250	AVRG	14.0	20.0
BROMOMETHANE	240	250	AVRG	4.0	20.0
CHLOROETHANE	238	250	AVRG	4.8	20.0
1 1-DICHLOROETHENE CCC	202	250	AVRG	19.2	20.0
METHYLENE CHLORIDE	205	250	AVRG	18.0	20.0
trans-1 2-DICHLOROETHENE	214	250	AVRG	14.4	20.0
1,1-DICHLOROETHANE spcc	217	250	AVRG	13.2	20.0
cis-1 2-DICHLOROETHENE	223	250	AVRG	10.8	20.0
CHLOROFORM CCC	222	250	AVRG	11.2	20.0
1 1 1-TRICHLOROETHANE	217	250	AVRG	13.2	20.0
CARBON TETRACHLORIDE	237	250	AVRG	5.2	20.0
BENZENE	204	250	AVRG	18.4	20.0
1 2-DICHLOROETHANE	214	250	AVRG	14.4	20.0
TRICHLOROETHENE	249	250	AVRG	0.4	20.0
1,2-DICHLOROPROPANE CCC	256	250	AVRG	-2.4	20.0
BROMODICHLOROMETHANE	258	250	AVRG	-3.2	20.0
TOLUENE CCC	203	250	AVRG	18.8	20.0
1 1 2-TRICHLOROETHANE	203	250	AVRG	18.8	20.0
TETRACHLOROETHENE	236	250	AVRG	5.6	20.0
DIBROMOCHLOROMETHANE	255	250	AVRG	-2.0	20.0
CHLOROBENZENE spcc	226	250	AVRG	9.6	20.0
ETHYLBENZENE CCC	212	250	AVRG	15.2	20.0
m/p-XYLENE	426	500	AVRG	14.8	20.0
o-XYLENE	227	250	AVRG	9.2	20.0
STYRENE	230	250	AVRG	8.0	20.0
BROMOFORM spcc	290	250	AVRG	-16.0	20.0
1 1 2-TETRACHLOROETHANE sp	201	250	AVRG	19.6	20.0
ACETONE	301	250	LINR	-20.4	20.0
CARBON DISULFIDE	234	250	AVRG	6.4	20.0
METHYL ETHYL KETONE	210	250	AVRG	16.0	20.0
2-HEXANONE	267	250	AVRG	-6.8	20.0
cis-1,3-DICHLOROPROPENE	250	250	AVRG	0.0	20.0
4-METHYL-2-PENTANONE	296	250	AVRG	-18.4	20.0
trans-1,3 DICHLOROPROPENE	224	250	AVRG	10.4	20.0
Total Xylenes	653	750	AVRG	12.9	20.0
1,2-DICHLOROETHENE (TOTAL)	437	500	AVRG	12.6	20.0

7A
VOLATILE CONTINUING CALIBRATION CHECK

186

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Instrument ID: MSD2 Calibration Date: 11/14/0 Time: 0802

Lab File ID: K142A0201002 Init. Calib. Date(s): 10/06/0 10/06/0

Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629

GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	CAL250 AMOUNT	CURVE	%D	MAX %d
1, 2-DICHLOROETHANE d-4	231	250	AVRG	7.6	20.0
TOLUENE d-8	224	250	AVRG	10.4	20.0
p-BROMOFLUOROBENZENE	207	250	AVRG	17.2	20.0

7A
VOLATILE CONTINUING CALIBRATION CHECK

187

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Instrument ID: MSD2 Calibration Date: 11/14/0 Time: 2126

Lab File ID: K142A2101021 Init. Calib. Date(s): 10/06/0 10/06/0

Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629

GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	RRF	RRF250	MIN RRF	%D	MAX %D
VINYL CHLORIDE ccc	0.201	0.169		15.9	
1,1-DICHLOROETHENE ccc	0.323	0.285		11.8	
CHLOROFORM ccc	0.997	1.060		-6.3	
CARBON TETRACHLORIDE	0.953	1.138		-19.4	
BENZENE	0.906	0.730		19.4	
1,2-DICHLOROETHANE	0.797	0.947		-18.8	
TRICHLOROETHENE	0.516	0.552		-7.0	
TETRACHLOROETHENE	0.810	0.945		-16.7	
CHLOROBENZENE spcc	1.031	0.988	0.300	4.2	20.0
METHYL ETHYL KETONE	0.332	0.390		-17.5	
1,2-DICHLOROETHANE d-4	0.666	0.769		-15.5	
TOLUENE d-8	1.176	1.072		8.8	
p-BROMOFLUOROBENZENE	1.499	1.330		11.3	

All other compounds must meet a minimum RRF of 0.010.

7A
VOLATILE CONTINUING CALIBRATION CHECK

188

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN
 Lab Code: K0P367 Case No.: SAS No.: SDG No.: K172A
 Instrument ID: MSD2 Calibration Date: 11/17/0 Time: 0753
 Lab File ID: K172A0201002 Init. Calib. Date(s): 10/06/0 10/06/0
 Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629
 GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	CAL250 AMOUNT	CURVE	%D	MAX %d
CHLOROMETHANE spcc	228	250	AVRG	8.8	20.0
VINYL CHLORIDE ccc	227	250	AVRG	9.2	20.0
BROMOMETHANE	278	250	AVRG	-11.2	20.0
CHLOROETHANE	275	250	AVRG	-10.0	20.0
1,1-DICHLOROETHENE ccc	254	250	AVRG	-1.6	20.0
METHYLENE CHLORIDE	221	250	AVRG	11.6	20.0
trans-1,2-DICHLOROETHENE	214	250	AVRG	14.4	20.0
1,1-DICHLOROETHANE spcc	252	250	AVRG	-0.8	20.0
cis-1,2-DICHLOROETHENE	222	250	AVRG	11.2	20.0
CHLOROFORM ccc	255	250	AVRG	-2.0	20.0
1,1,1-TRICHLOROETHANE	283	250	AVRG	-13.2	20.0
CARBON TETRACHLORIDE	298	250	AVRG	-19.2	20.0
BENZENE	216	250	AVRG	13.6	20.0
1,2-DICHLOROETHANE	274	250	AVRG	-9.6	20.0
TRICHLOROETHENE	262	250	AVRG	-4.8	20.0
1,2-DICHLOROPROPANE ccc	290	250	AVRG	-16.0	20.0
BROMODICHLOROMETHANE	297	250	AVRG	-18.8	20.0
TOLUENE ccc	224	250	AVRG	10.4	20.0
1,1,2-TRICHLOROETHANE	207	250	AVRG	17.2	20.0
TETRACHLOROETHENE	230	250	AVRG	8.0	20.0
DIBROMOCHLOROMETHANE	278	250	AVRG	-11.2	20.0
CHLOROBENZENE spcc	229	250	AVRG	8.4	20.0
ETHYLBENZENE ccc	230	250	AVRG	8.0	20.0
m/p-XYLENE	460	500	AVRG	8.0	20.0
o-XYLENE	212	250	AVRG	15.2	20.0
STYRENE	234	250	AVRG	6.4	20.0
BROMOFORM spcc	302	250	AVRG	-20.8	20.0 <-
1,1,2,2-TETRACHLOROETHANE sp	229	250	AVRG	8.4	20.0
ACETONE	313	250	LINR	-25.2	20.0 <-
CARBON DISULFIDE	226	250	AVRG	9.6	20.0
METHYL ETHYL KETONE	226	250	AVRG	9.6	20.0
2-HEXANONE	250	250	AVRG	0.0	20.0
cis-1,3-DICHLOROPROPENE	289	250	AVRG	-15.6	20.0
4-METHYL-2-PENTANONE	264	250	AVRG	-5.6	20.0
trans-1,3-DICHLOROPROPENE	248	250	AVRG	0.8	20.0
Total Xylenes	673	750	AVRG	10.3	20.0
1,2-DICHLOROETHENE (TOTAL)	436	500	AVRG	12.8	20.0

189

7A
VOLATILE CONTINUING CALIBRATION CHECK

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN
Lab Code: K0P367 Case No.: SAS No.: SDG No.: K172A
Instrument ID: MSD2 Calibration Date: 11/17/0 Time: 0753
Lab File ID: K172A0201002 Init. Calib. Date(s): 10/06/0 10/06/0
Heated Purge: (Y/N) N Init. Calib. Times: 1219 1629
GC Column: OV-624 ID: 0.53 (mm)

COMPOUND	SAMPLE AMOUNT	CAL250 AMOUNT	CURVE	%D	MAX %d
1,2-DICHLOROETHANE d-4	270	250	AVRG	-8.0	20.0
TOLUENE d-8	228	250	AVRG	8.8	20.0
p-BROMOFLUOROBENZENE	232	250	AVRG	7.2	20.0

4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

190

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

KX010-210

Lab Code: K0P367 Case No.:

SAS No.:

SDG No.: K142A

Lab File ID: K142A0501005

Lab Sample ID: OK0X010210

Date Analyzed: 11/14/0

Time Analyzed: 1008

GC Column: OV-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSD2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	KX010-210MS	OK0X010208	K142A0301003	0844
02	KP367-06	OK0P367006	K142A0801008	1212
03				
04				
05				
06				
07				
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COMMENTS:

CT&E Environmental Services Inc

VOLATILE ISTD AND RATIO REPORT

Data file : /orgdata/VOA.msd/msd2.i/K142A.b/K142A0501005.d
Lab Smp Id: OK0X010210 Client Smp ID: KX010-210
Inj Date : 14-NOV-2000 10:08
Operator : PAC Inst ID: msd2.i
Smp Info : KX010-210
Misc Info :
Comment : VOLATILE CAPILLARY METHOD
Method : /orgdata/VOA.msd/msd2.i/K142A.b/8260_5mlH20.m
Meth Date : 09-Jan-2001 13:35 mam Quant Type: ISTD
Cal Date : 06-OCT-2000 16:29 Cal File: J062A0801008.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOATCL8260.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: ctegc1

Concentration Formula: Amt * DF * (100*Vt) / (Ws*Va*S)

Name	Value	Description
DF	1.000	Dilution Factor
S	100.000	% solid
Vt	10.000	volume final ext+sur
Ws	4.000	Weight of sample extracted (g)
Va	0.200	vol of aliq. ext.

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE (ng)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	==	=====	=====	=====	=====
*	1 FLUOROBENZENE				CAS #: 462-06-6		
12.994	13.009	(1.000)	96	3596168	250.000	80.00- 120.00	100.00
12.994	13.009	(1.000)	70	874088		20.09- 30.14	24.31
12.994	13.009	(1.000)	95	372034		7.62- 11.43	10.35
-----	-----	-----	-----	-----	-----	-----	-----
*	2 CHLOROBENZENE-d5				CAS #: 3114-55-4		
22.001	22.057	(1.000)	117	3345944	250.000	80.00- 120.00	100.00(Q)
22.030	22.057	(1.000)	119	1174146		25.51- 38.26	35.09
22.030	22.057	(1.000)	82	2364292		12.55- 18.83	70.66
-----	-----	-----	-----	-----	-----	-----	-----
*	3 1 2-DICHLOROBENZENE d4				CAS #: 2199-69-1		
28.457	28.468	(1.000)	152	2629495	250.000	80.00- 120.00	100.00(Q)
28.443	28.468	(1.000)	115	1510334		77.01- 115.51	57.44

RT	EXP RT	(REL RT)	MASS	CONCENTRATIONS		TARGET RANGE	RATIO		
				ON-COL	FINAL				
==	=====	=====	====	=====	=====	=====	=====		
* 3 1 2-DICHLOROBENZENE d4 (continued)									
28.457	28.468	(1.000)	150	3745719		177.80-	266.70	142.45	

\$ 5	1,2-DICHLOROETHANE	d-4			CAS #: 17060-07-0				
12.237	12.251	(0.942)	65	2399472	250.555	3130	80.00-	120.00	100.00(Q)
12.208	12.251	(0.940)	102	296364		0.00-	0.00		12.35

\$ 7	TOLUENE	d-8			CAS #: 2037-26-5				
17.328	17.366	(0.788)	98	3622258	230.053	2880	80.00-	120.00	100.00(Q)
17.343	17.366	(0.788)	100	2318502		47.33-	71.00		64.01
17.343	17.366	(0.788)	70	533217		0.03-	0.04		14.72

\$ 8	p-BROMOFLUOROBENZENE				CAS #: 460-00-4				
25.570	25.584	(0.899)	95	3347188	212.261	2650	80.00-	120.00	100.00(Q)
25.570	25.584	(0.899)	174	3174401		58.92-	88.38		94.84
25.424	25.584	(0.893)	176	5680		0.02-	0.02		0.17

QC Flag Legend

Q - Qualifier signal failed the ratio test.

CT&E Environmental Services Inc

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd2.i
Lab File ID: K142A0501005.d
Lab Smp Id: 0K0X010210
Analysis Type: VOA
Quant Type: ISTD
Operator: PAC
Method File: /orgdata/VOA.msd/msd2.i/K142A.b/8260_5mlH20.m
Misc Info:

Calibration Date: 14-NOV-2000
Calibration Time: 08:02
Client Smp ID: KX010-210
Level: MED
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	4302654	2151327	8605308	3596168	-16.42
2 CHLOROBENZENE-d5	4016747	2008374	8033494	3345944	-16.70
3 1 2-DICHLOROBENZE	2824523	1412262	5649046	2629495	-6.90

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	12.98	12.48	13.48	12.99	0.08
2 CHLOROBENZENE-d5	21.98	21.48	22.48	22.00	0.07
3 1 2-DICHLOROBENZE	28.46	27.96	28.96	28.46	0.01

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

CT&E Environmental Services Inc

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RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: OK0X010210
Level: MED
Data Type: MS DATA
SpikeList File: Col1cs.spk
Sublist File: VOATCL8260.sub
Method File: /orgdata/VOA.msd/msd2.i/K142A.b/8260_5mlH20.m
Misc Info:

Client SDG: K142A
Fraction: VOA
Client Smp ID: KX010-210
Operator: PAC
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 5 1,2-DICHLOROETHANE	3120	3130	100.22	70-121
\$ 7 TOLUENE d-8	3120	2880	92.02	81-117
\$ 8 p-BROMOFLUOROBENZE	3120	2650	84.90	74-121

CT&E Environmental Services Inc

Copy 195

TARGET COMPOUNDS

Client Name: Client SDG: K142A
Lab Smp Id: OK0X010210 Client Smp ID: KX010-210
Sample Location: Sample Point:
Sample Date: Date Received:
Sample Matrix: SOIL Quant Type: ISTD
Analysis Type: VOA Level: MED
Data Type: MS DATA Operator: PAC
Misc Info:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg) ug/Kg	Q
17060-07-0	1,2-DICHLOROETHANE d-4	3130	
2037-26-5	TOLUENE d-8	2880	
460-00-4	p-BROMOFLUOROBENZENE	2650	

Data File: /orgdata/V0A.msd/msd2.i/K142A.b/K142A0501005.d

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Date : 14-NOV-2000 10:08

Client ID: KX010-210

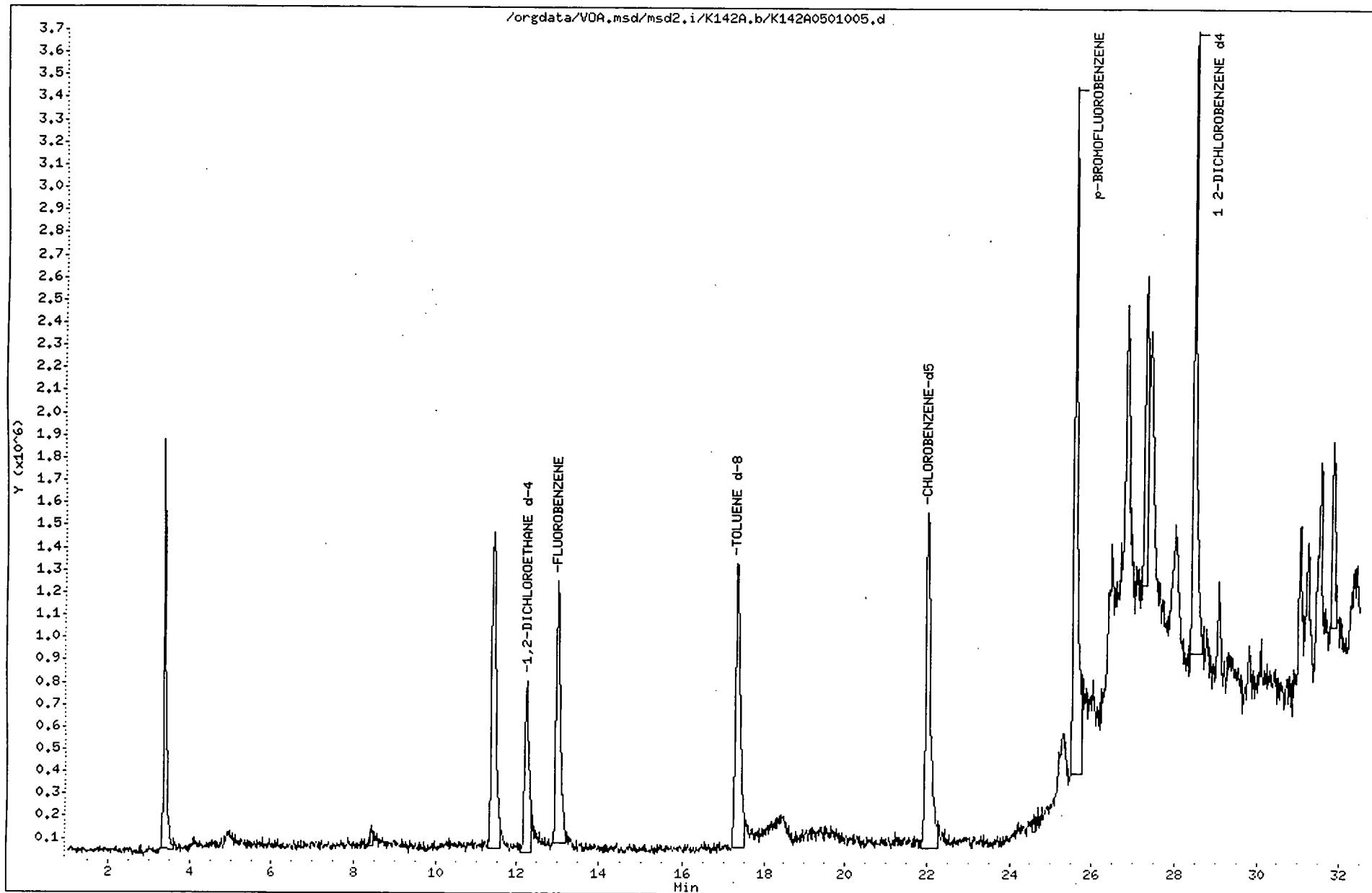
Sample Info: KX010-210

Instrument: msd2.i

Column phase: OV-624

Operator: PAC

Column diameter: 0.53



4A
VOLATILE METHOD BLANK SUMMARY

EPA SAMPLE NO.

197

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

KX010-212

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Lab File ID: K142A0501005A Lab Sample ID: OKOX010212

Date Analyzed: 11/14/0 Time Analyzed: 1008

GC Column: OV-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

Instrument ID: MSD2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	KX010-212MS	OKOX010211	K142A0301003	0844
02	KP367-02	OK0P367002	K142A1701017	1837
03	KP367-02MS	OK0P367003	K142A1801018	1919
04	MB2	MB2	K142A2201022	2208
05	KP367-05	OK0P367005	K142A2301023	2251
06	KP367-07	OK0P367007	K142A2401024	2333
07	KP367-07MS	OK0P367008	K142A2501025	0016
08				
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COMMENTS:

CT&E Environmental Services Inc

VOLATILE ISTD AND RATIO REPORT

Data file : /orgdata/VOA.msd/msd2.i/K142A.b/K142A0501005A.d
Lab Smp Id: 0K0X010212 Client Smp ID: KX010-212
Inj Date : 14-NOV-2000 10:08
Operator : PAC Inst ID: msd2.i
Smp Info : KX010-212
Misc Info :
Comment : VOLATILE CAPILLARY METHOD
Method : /orgdata/VOA.msd/msd2.i/K142A.b/8260_5mlH20.m
Meth Date : 09-Jan-2001 13:35 mam Quant Type: ISTD
Cal Date : 06-OCT-2000 16:29 Cal File: J062A0801008.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOALCH8260.sub
Target Version: 3.40 Sample Matrix: WATER
Processing Host: ctegc1

Concentration Formula: Amt * DF * 1/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vo	5.000	volume purged

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====
* 1 FLUOROBENZENE					CAS #: 462-06-6		
12.994	13.009	(1.000)	96	3596168	250.000	80.00- 120.00	100.00
12.994	13.009	(1.000)	70	874088		20.09- 30.14	24.31
12.994	13.009	(1.000)	95	372034		7.62- 11.43	10.35
-----	-----	-----	-----	-----	-----	-----	-----
* 2 CHLOROBENZENE-d5				CAS #: 3114-55-4			
22.001	22.057	(1.000)	117	3345944	250.000	80.00- 120.00	100.00(Q)
22.030	22.057	(1.000)	119	1174146		25.51- 38.26	35.09
22.030	22.057	(1.000)	82	2364292		12.55- 18.83	70.66
-----	-----	-----	-----	-----	-----	-----	-----
* 3 1,2-DICHLOROBENZENE d4				CAS #: 2199-69-1			
28.457	28.468	(1.000)	152	2629495	250.000	80.00- 120.00	100.00(Q)
28.443	28.468	(1.000)	115	1510334		77.01- 115.51	57.44
28.457	28.468	(1.000)	150	3745719		177.80- 266.70	142.45
-----	-----	-----	-----	-----	-----	-----	-----
\$ 5 1,2-DICHLOROETHANE d-4				CAS #: 17060-07-0			
12.237	12.251	(0.942)	65	2399472	250.555	50.1 80.00- 120.00	100.00(Q)

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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT (REL RT)	MASS	RESPONSE (ng)	(ug/L)	TARGET RANGE	RATIO
==	=====	====	=====	=====	=====	=====

\$ 5 1,2-DICHLOROETHANE d-4 (continued)

12.208	12.251 (0.940)	102	296364		0.00-	0.00	12.35
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\$ 7 TOLUENE d-8

CAS #: 2037-26-5

17.328	17.366 (0.788)	98	3622258	230.053	46.0	80.00-	120.00	100.00(Q)
17.343	17.366 (0.788)	100	2318502		47.33-	71.00		64.01
17.343	17.366 (0.788)	70	533217		0.03-	0.04		14.72

\$ 8 p-BROMOFLUOROBENZENE

CAS #: 460-00-4

25.570	25.584 (0.899)	95	3347188	212.261	42.4	80.00-	120.00	100.00(QR)
25.570	25.584 (0.899)	174	3174401		58.92-	88.38		94.84
25.424	25.584 (0.893)	176	5680		0.02-	0.02		0.17

QC Flag Legend

Q - Qualifier signal failed the ratio test.

R - Spike/Surrogate failed recovery limits.

CT&E Environmental Services Inc

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INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd2.i
Lab File ID: K142A0501005A.d
Lab Smp Id: OK0X010212
Analysis Type: VOA
Quant Type: ISTD
Operator: PAC
Method File: /orgdata/VOA.msd/msd2.i/K142A.b/8260_5mlH20.m
Misc Info:

Calibration Date: 14-NOV-2000
Calibration Time: 08:02
Client Smp ID: KX010-212
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	4302654	2151327	8605308	3596168	-16.42
2 CHLOROBENZENE-d5	4016747	2008374	8033494	3345944	-16.70
3 1 2-DICHLOROBENZE	2824523	1412262	5649046	2629495	-6.90

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	12.98	12.48	13.48	12.99	0.08
2 CHLOROBENZENE-d5	21.98	21.48	22.48	22.00	0.07
3 1 2-DICHLOROBENZE	28.46	27.96	28.96	28.46	0.01

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

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CT&E Environmental Services Inc

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: OK0X010212
Level: LOW
Data Type: MS DATA
SpikeList File: Collcs.spk
Sublist File: VOALCH8260.sub
Method File: /orgdata/VOA.msd/msd2.i/K142A.b/8260_5mlH20.m
Misc Info:

Client SDG: K142A
Fraction: VOA
Client Smp ID: KX010-212
Operator: PAC
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 5 1,2-DICHLOROETHANE	50.0	50.1	100.22	76-114
\$ 7 TOLUENE d-8	50.0	46.0	92.02	88-110
\$ 8 p-BROMOFLUOROBENZE	50.0	42.4	84.90*	86-115

CT&E Environmental Services Inc

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TARGET COMPOUNDS

Client Name: Client SDG: K142A
Lab Smp Id: OK0X010212 Client Smp ID: KX010-212
Sample Location: Sample Point:
Sample Date: Date Received:
Sample Matrix: WATER Quant Type: ISTD
Analysis Type: VOA Level: LOW
Data Type: MS DATA Operator: PAC
Misc Info:

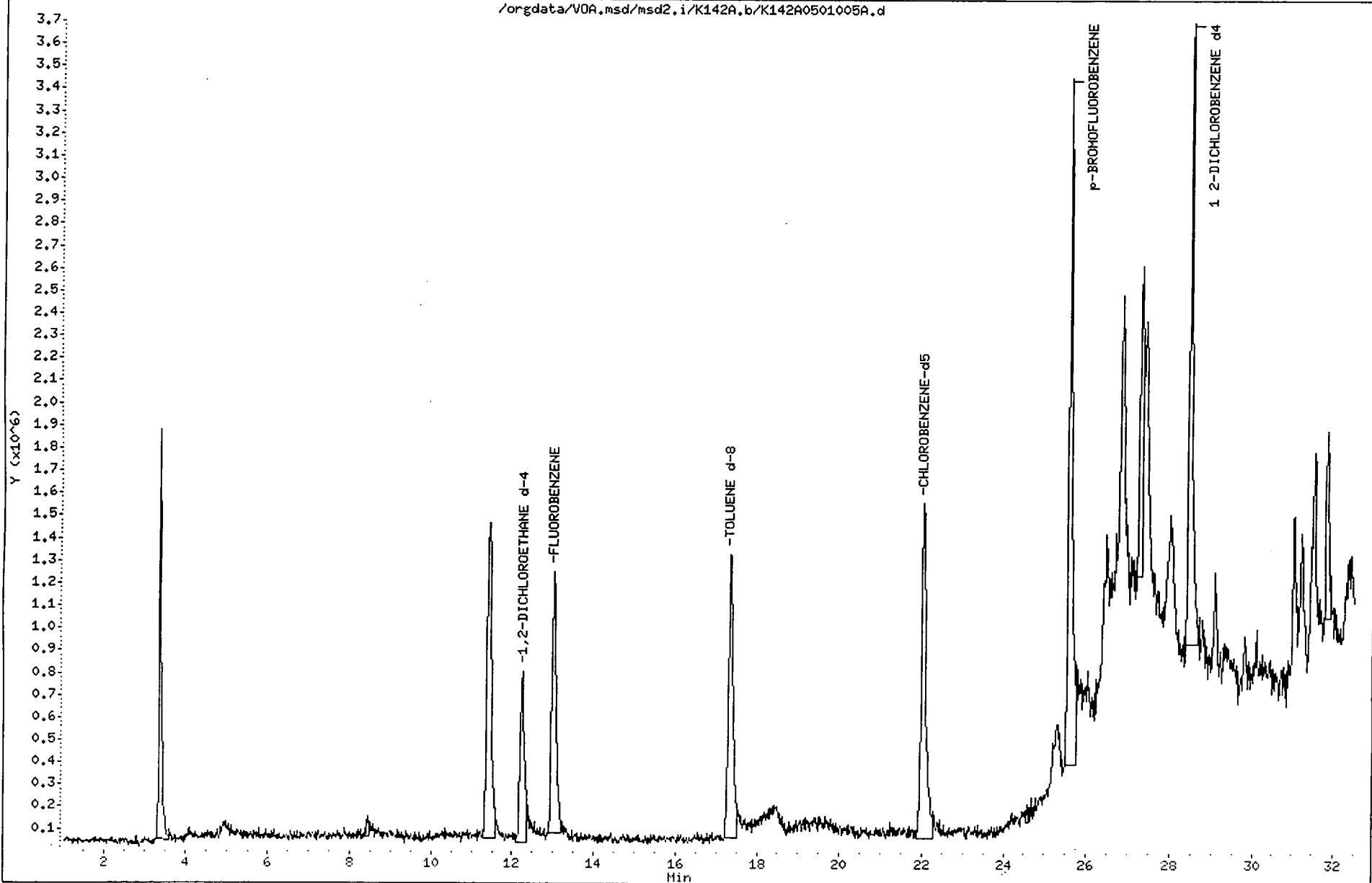
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
17060-07-0	1,2-DICHLOROETHANE d-4	50.1	
2037-26-5	TOLUENE d-8	46.0	
460-00-4	p-BROMOFLUOROBENZENE	42.4	

2003
Data File: /orgdata/VOA.msd/msd2.i/K142A.b/K142A0501005A.d
Date : 14-NOV-2000 10:08
Client ID: KX010-212
Sample Info: KX010-212
Purge Volume: 5.0
Column phase: OV-624

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Instrument: msd2.i
Operator: PAC
Column diameter: 0.53

/orgdata/VOA.msd/msd2.i/K142A.b/K142A0501005A.d



4A
VOLATILE METHOD BLANK SUMMARYEPA SAMPLE NO. *JUH*

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

KX010-304

Lab Code: K0P367 Case No.:

SAS No.:

SDG No.: K172A

Lab File ID: K172A0501005A

Lab Sample ID: OK0X010304

Date Analyzed: 11/17/0

Time Analyzed: 0958

GC Column: OV-624 ID: 0.53 (mm)

Heated Purge: (Y/N) N

Instrument ID: MSD2

THIS METHOD BLANK APPLIES TO THE FOLLOWING SAMPLES, MS and MSD:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	TIME ANALYZED
01	KX010-304MS	OK0X010302	K172A0301003	0834
02	KP367-01MS	OK0P367009	K172A0801008	1203
03	KP367-01MSD	OK0P367010	K172A0901009	1253
04				
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COMMENTS:

CT&E Environmental Services Inc

VOLATILE ISTD AND RATIO REPORT

Data file : /orgdata/VOA.msd/msd2.i/K172A.b/K172A0501005A.d
Lab Smp Id: OK0X010304 Client Smp ID: KX010-304
Inj Date : 17-NOV-2000 09:58
Operator : MAM Inst ID: msd2.i
Smp Info : KX010-304
Misc Info :
Comment : VOLATILE CAPILLARY METHOD
Method : /orgdata/VOA.msd/msd2.i/K172A.b/8260_5mlH20.m
Meth Date : 09-Jan-2001 13:38 mam Quant Type: ISTD
Cal Date : 06-OCT-2000 16:29 Cal File: J062A0801008.d
Als bottle: 5 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: VOATCL8260.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: ctegcl

Concentration Formula: Amt * DF * (100*Vt) / (Ws*Va*S)

Name	Value	Description
DF	1.000	Dilution Factor
S	100.000	% solid
Vt	10.000	volume final ext+sur
Ws	4.000	Weight of sample extracted (g).
Va	0.200	vol of aliq. ext.

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE (ng)	(ug/Kg)	TARGET RANGE	RATIO
13.002	13.009	(1.000)	96	2374657	250.000	80.00- 120.00	100.00(Q)
13.002	13.009	(1.000)	70	631902		18.76- 28.14	26.61
12.988	13.009	(1.000)	95	286363		7.62- 11.43	12.06

* 1	FLUOROBENZENE				CAS #: 462-06-6		
22.029	22.057	(1.000)	117	2110343	250.000	80.00- 120.00	100.00(Q)
22.029	22.057	(1.000)	119	640861		22.47- 33.71	30.37
22.029	22.057	(1.000)	82	1479334		12.55- 18.83	70.10

* 2	CHLOROBENZENE-d5				CAS #: 3114-55-4		
28.464	28.468	(1.000)	152	1449718	250.000	80.00- 120.00	100.00(Q)
28.450	28.468	(1.000)	115	1069096		77.01- 115.51	73.75

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CONCENTRATIONS
ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE (ng)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	====	=====	=====	=====	=====	=====
* 3 1 2-DICHLOROBENZENE d4 (continued)								
28.450	28.468	(1.000)	150	2222186		177.80-	266.70	153.28

\$ 5 1,2-DICHLOROETHANE d-4					CAS #: 17060-07-0			
12.246	12.251	(0.942)	65	1687737	266.889	3340	80.00- 120.00	100.00(M)
12.275	12.251	(0.944)	102	148600		0.00-	0.00	8.80

\$ 7 TOLUENE d-8					CAS #: 2037-26-5			
17.319	17.366	(0.786)	98	2367877	238.437	2980	80.00- 120.00	100.00(Q)
17.334	17.366	(0.787)	100	1275955		49.86-	74.79	53.89
17.334	17.366	(0.787)	70	349927		0.03-	0.04	14.78

\$ 8 p-BROMOFLUOROBENZENE					CAS #: 460-00-4			
25.577	25.584	(0.899)	95	2142057	246.382	3080	80.00- 120.00	100.00(Q)
25.577	25.584	(0.899)	174	1786695		58.92-	88.38	83.41
25.562	25.584	(0.898)	176	1819782		0.02-	0.02	84.95

QC Flag Legend

Q - Qualifier signal failed the ratio test.

M - Compound response manually integrated.

CT&E Environmental Services Inc

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd2.i

Lab File ID: K172A0501005A.d

Lab Smp Id: OK0X010304

Analysis Type: VOA

Quant Type: ISTD

Operator: MAM

Method File: /orgdata/VOA.msd/msd2.i/K172A.b/8260_5mlH20.m

Misc Info:

Calibration Date: 17-NOV-2000

Calibration Time: 07:53

Client Smp ID: KX010-304

Level: MED

Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	2556808	1278404	5113616	2374657	-7.12
2 CHLOROBENZENE-d5	2415785	1207892	4831570	2110343	-12.64
3 1 2-DICHLOROBENZE	1686150	843075	3372300	1449718	-14.02

COMPOUND	STANDARD	RT LIMIT		SAMPLE	%DIFF
		LOWER	UPPER		
1 FLUOROBENZENE	13.01	12.51	13.51	13.00	-0.07
2 CHLOROBENZENE-d5	22.03	21.53	22.53	22.03	-0.02
3 1 2-DICHLOROBENZE	28.47	27.97	28.97	28.46	-0.01

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

CT&E Environmental Services Inc

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RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: OK0X010304
Level: MED
Data Type: MS DATA
SpikeList File: Collcs.spk
Sublist File: VOATCL8260.sub
Method File: /orgdata/VOA.msd/msd2.i/K172A.b/8260_5mlH20.m
Misc Info:

Client SDG: K172A
Fraction: VOA
Client Smp ID: KX010-304
Operator: MAM
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 5 1,2-DICHLOROETHANE	3120	3340	106.76	70-121
\$ 7 TOLUENE d-8	3120	2980	95.37	81-117
\$ 8 p-BROMOFLUOROBENZE	3120	3080	98.55	74-121

CT&E Environmental Services Inc

209

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 0K0X010304
Sample Location:
Sample Date:
Sample Matrix: SOIL
Analysis Type: VOA
Data Type: MS DATA
Misc Info:

Client SDG: K172A
Client Smp ID: KX010-304
Sample Point:
Date Received:
Quant Type: ISTD
Level: MED
Operator: MAM

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
17060-07-0	1,2-DICHLOROETHANE d-4		3340	
2037-26-5	TOLUENE d-8		2980	
460-00-4	p-BROMOFLUOROBENZENE		3080	

0

Data File: /orgdata/VOA.msd/msd2.i/K172A.b/K172A0501005A.d

Page 6

Date : 17-NOV-2000 09:58

Client ID: KX010-304

Sample Info: KX010-304

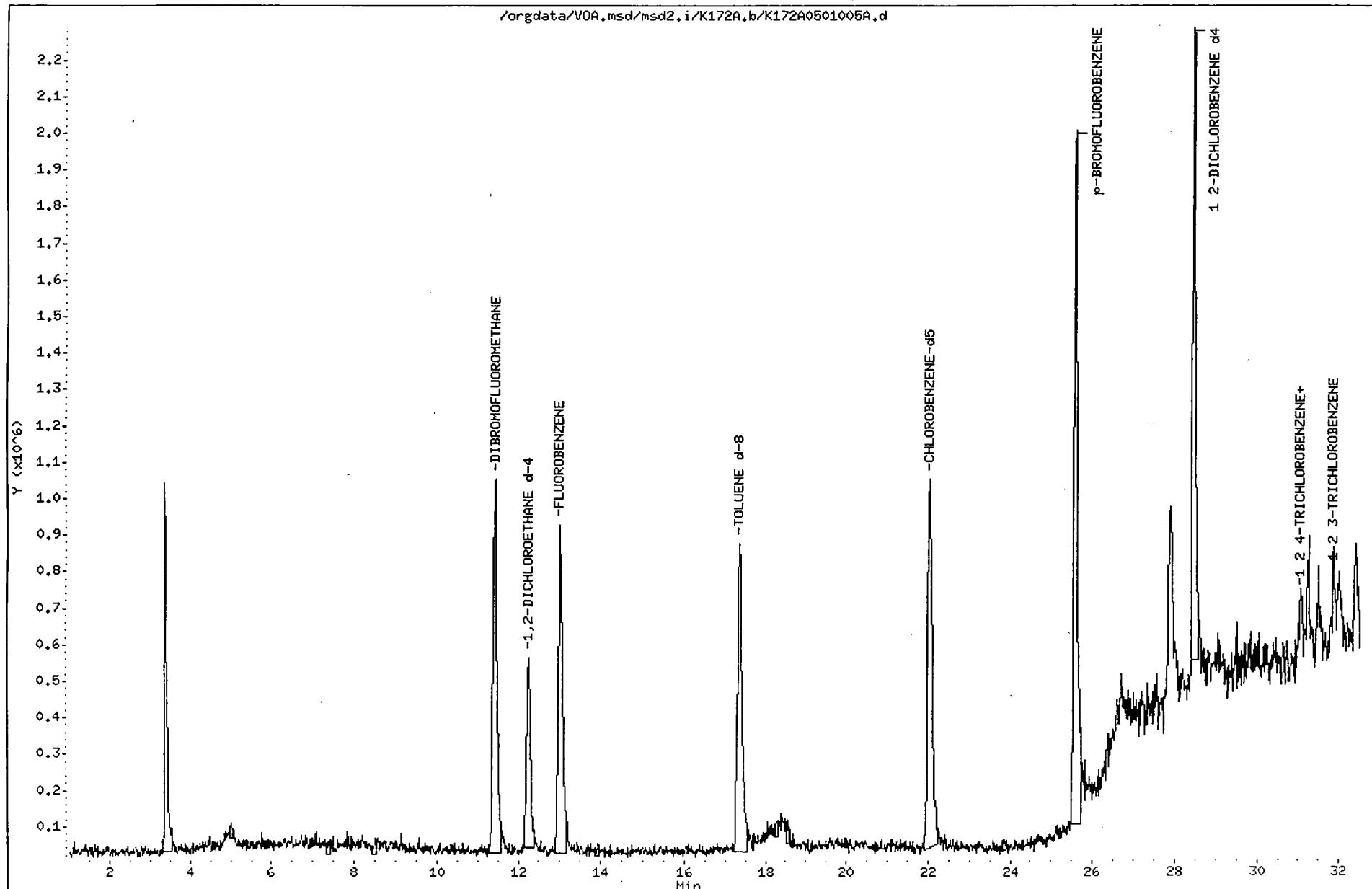
Column phase: OV-624

Instrument: msd2.i

Operator: MAM

Column diameter: 0.53

/orgdata/VOA.msd/msd2.i/K172A.b/K172A0501005A.d



3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

211

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Matrix Spike - EPA Sample No.: KX010-210 Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-DICHLOROETHENE CCC	1560	0.000	1320	85	75-125
BENZENE	1560	0.000	1350	86	75-125
TRICHLOROETHENE	1560	0.000	1820	117	75-125
TOLUENE CCC	1560	0.000	1350	86	75-125
CHLOROBENZENE spcc	1560	0.000	1360	87	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS: LCS

3A
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

212

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Matrix Spike - EPA Sample No.: KX010-212

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
VINYL CHLORIDE CCC	25.0	0.000	20.8	83	75-125
1 1-DICHLOROETHENE CCC	25.0	0.000	21.2	85	75-125
CHLOROFORM CCC	25.0	0.000	21.9	88	75-125
CARBON TETRACHLORIDE	25.0	0.000	28.1	112	75-125
BENZENE	25.0	0.000	21.7	87	75-125
1 2-DICHLOROETHANE	25.0	0.000	24.8	99	75-125
TRICHLOROETHENE	25.0	0.000	29.2	117	75-125
TETRACHLOROETHENE	25.0	0.000	24.8	99	75-125
CHLOROBENZENE spcc	25.0	0.000	21.7	87	75-125
METHYL ETHYL KETONE	25.0	0.000	23.0	92	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: LCS

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

21

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K172A

Matrix Spike - EPA Sample No.: KX010-304 Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1 1-DICHLOROETHENE CCC	1560	0.000	1520	97	75-125
BENZENE	1560	0.000	1380	88	75-125
TRICHLOROETHENE	1560	0.000	1670	107	75-125
TOLUENE CCC	1560	0.000	1500	96	75-125
CHLOROBENZENE spcc	1560	0.000	1480	95	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 5 outside limits

COMMENTS:

LCS

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Matrix Spike - EPA Sample No.: KP367-02

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
VINYL CHLORIDE ccc	500	0.000	441	88	75-125
1 1-DICHLOROETHENE ccc	500	0.000	406	81	75-125
CHLOROFORM ccc	500	0.000	482	96	75-125
CARBON TETRACHLORIDE	500	0.000	573	115	75-125
BENZENE	500	0.000	390	78	75-125
1 2-DICHLOROETHANE	500	0.000	582	116	75-125
TRICHLOROETHENE	500	0.000	536	107	75-125
TETRACHLOROETHENE	500	0.000	612	122	75-125
CHLOROBENZENE spcc	500	0.000	422	84	75-125
METHYL ETHYL KETONE	500	0.000	593	119	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: leachate matrix spike

3B
WATER VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

2141

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Matrix Spike - EPA Sample No.: KP367-07 Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
VINYL CHLORIDE ccc	25000	0.000	20500	82	75-125
1 1-DICHLOROETHENE ccc	25000	0.000	19400	78	75-125
CHLOROFORM ccc	25000	0.000	22900	92	75-125
CARBON TETRACHLORIDE	25000	0.000	27300	109	75-125
BENZENE	25000	15000	34700	79	75-125
1 2-DICHLOROETHANE	25000	0.000	26100	104	75-125
TRICHLOROETHENE	25000	0.000	28900	116	75-125
TETRACHLOROETHENE	25000	0.000	26500	106	75-125
CHLOROBENZENE spcc	25000	0.000	22600	90	75-125
METHYL ETHYL KETONE	25000	0.000	23900	96	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

3B
SOIL VOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

215

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K172A

Matrix Spike - EPA Sample No.: KP367-01 Level: (low/med) MED

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
1,1-DICHLOROETHENE CCC	1560	0.000	1340	86	75-125
BENZENE	1560	0.000	1370	88	75-125
TRICHLOROETHENE	1560	0.000	1590	102	75-125
TOLUENE CCC	1560	0.000	1560	100	75-125
CHLOROBENZENE spcc	1560	0.000	1430	92	75-125

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC RPD	LIMITS REC.
1,1-DICHLOROETHENE CCC	1560	1650	106	21	22	75-125
BENZENE	1560	1420	91	3	25	75-125
TRICHLOROETHENE	1560	1730	111	8	24	75-125
TOLUENE CCC	1560	1690	108	8	25	75-125
CHLOROBENZENE spcc	1560	1400	90	2	25	75-125

Column to be used to flag recovery and RPD values with an asterisk

* Values outside of QC limits

RPD: 0 out of 5 outside limits

Spike Recovery: 0 out of 10 outside limits

COMMENTS: _____

2A
WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

Q16

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	OTHER	TOT OUT
01	KX010-212MS	96	91	107		0
02	KX010-212	100	92	89		0
03	KP367-02	111	93	105		0
04	KP367-02MS	112	102	106		0
05	MB2	111	98	98		0
06	KP367-05	113	97	108		0
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QC LIMITS

SMC1	= 1,2-DICHLOROETHANE d-4	(76-114)
SMC2	= TOLUENE d-8	(88-110)
SMC3	= p-BROMOFLUOROBENZENE	(86-115)

Column to be used to flag recovery values

* Values outside of contract required QC limits

217

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Level: (low/med) MED

EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	OTHER	TOT OUT
01 KX010-210MS	96	90	107		0
02 KX010-210	100	92	85		0
03 KP367-06	89	101	94		0
04					
05					
06					
07					
08					
09					
10					
11					
12					
13					
14					
15					
16					
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18					
19					
20					
21					
22					
23					
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27					
28					
29					
30					

QC LIMITS

SMC1 = 1,2-DICHLOROETHANE d-4 (70-121)
 SMC2 = TOLUENE d-8 (81-117)
 SMC3 = p-BROMOFLUOROBENZENE (74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

WATER VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

218
C:\...\

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Level: (low/med) MED

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	OTHER	TOT OUT
01	KP367-07	116	88	97	_____	0
02	KP367-07MS	108	102	95	_____	0
03	_____	_____	_____	_____	_____	_____
04	_____	_____	_____	_____	_____	_____
05	_____	_____	_____	_____	_____	_____
06	_____	_____	_____	_____	_____	_____
07	_____	_____	_____	_____	_____	_____
08	_____	_____	_____	_____	_____	_____
09	_____	_____	_____	_____	_____	_____
10	_____	_____	_____	_____	_____	_____
11	_____	_____	_____	_____	_____	_____
12	_____	_____	_____	_____	_____	_____
13	_____	_____	_____	_____	_____	_____
14	_____	_____	_____	_____	_____	_____
15	_____	_____	_____	_____	_____	_____
16	_____	_____	_____	_____	_____	_____
17	_____	_____	_____	_____	_____	_____
18	_____	_____	_____	_____	_____	_____
19	_____	_____	_____	_____	_____	_____
20	_____	_____	_____	_____	_____	_____
21	_____	_____	_____	_____	_____	_____
22	_____	_____	_____	_____	_____	_____
23	_____	_____	_____	_____	_____	_____
24	_____	_____	_____	_____	_____	_____
25	_____	_____	_____	_____	_____	_____
26	_____	_____	_____	_____	_____	_____
27	_____	_____	_____	_____	_____	_____
28	_____	_____	_____	_____	_____	_____
29	_____	_____	_____	_____	_____	_____
30	_____	_____	_____	_____	_____	_____

QC LIMITS

SMC1 = 1,2-DICHLOROETHANE d-4 (70-121)
 SMC2 = TOLUENE d-8 (81-117)
 SMC3 = p-BROMOFLUOROBENZENE (74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

2B
SOIL VOLATILE SYSTEM MONITORING COMPOUND RECOVERY

219

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K172A

Level: (low/med) MED

	EPA SAMPLE NO.	SMC1 #	SMC2 #	SMC3 #	OTHER	TOT OUT
01	KX010-304MS	113	102	92		0
02	KX010-304	107	95	98		0
03	KP367-01MS	117	91	108		0
04	KP367-01MSD	115	92	99		0
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QC LIMITS

SMC1	= 1,2-DICHLOROETHANE d-4	(70-121)
SMC2	= TOLUENE d-8	(81-117)
SMC3	= p-BROMOFLUOROBENZENE	(74-121)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D System Monitoring Compound diluted out

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

22

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Lab File ID (Standard): K142A0201002 Date Analyzed: 11/14/0

Instrument ID: MSD2 Time Analyzed: 0802

GC Column: OV-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	4302654	12.98	4016747	21.98	2824523	28.46
UPPER LIMIT	8605308	13.48	8033494	22.48	5649046	28.96
LOWER LIMIT	2151327	12.48	2008374	21.48	1412262	27.96
EPA SAMPLE NO.						
01 KX010-210MS	3880538	13.00	3847876	22.02	2177583	28.43
02 KX010-212MS	3880538	13.00	3847876	22.02	2177583	28.43
03 KX010-210	3596168	12.99	3345944	22.00	2629495	28.46
04 KX010-212	3596168	12.99	3345944	22.00	2629495	28.46
05 KP367-06	3534102	13.01	2922915	22.01	2135685	28.46
06 KP367-02	2726447	12.99	2398482	22.05	1636257	28.46
07 KP367-02MS	2776599	13.00	2219387	22.01	1442281	28.44
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IS1 = FLUOROBENZENE
 IS2 (CBZ) = CHLOROBENZENE-d5
 IS3 = 1,2-DICHLOROBENZENE d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

221

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K142A

Lab File ID (Standard): K142A2101021 Date Analyzed: 11/14/0

Instrument ID: MSD2 Time Analyzed: 2126

GC Column: OV-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	2576768	12.98	2337906	22.02	1666725	28.46
UPPER LIMIT	5153536	13.48	4675812	22.52	3333450	28.96
LOWER LIMIT	1288384	12.48	1168953	21.52	8333362	27.96
EPA SAMPLE NO.						
01 MB2	2767532	12.98	2488206	22.02	1769385	28.45
02 KP367-05	2519472	12.99	2253403	22.02	1429560	28.44
03 KP367-07	2245466	12.98	2357717	22.03	1488227	28.45
04 KP367-07MS	2912450	12.97	2564854	22.04	2276414	28.45
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IS1 = FLUOROBENZENE
 IS2 (CBZ) = CHLOROBENZENE-d5
 IS3 = 1,2-DICHLOROBENZENE d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

8A
VOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

222

C:\...\111\111

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN
 Lab Code: K0P367 Case No.: SAS No.: SDG No.: K172A
 Lab File ID (Standard): K172A0201002 Date Analyzed: 11/17/0
 Instrument ID: MSD2 Time Analyzed: 0753
 GC Column: OV-624 ID: 0.53 (mm) Heated Purge: (Y/N) N

	IS1 AREA #	RT #	IS2 (CBZ) AREA #	RT #	IS3 AREA #	RT #
12 HOUR STD	2556808	13.01	2415785	22.03	1686150	28.47
UPPER LIMIT	5113616	13.51	4831570	22.53	3372300	28.97
LOWER LIMIT	1278404	12.51	1207892	21.53	843075	27.97
EPA SAMPLE NO.						
01 KX010-304MS	2519706	13.02	2232131	22.04	1703672	28.46
02 KX010-304	2374657	13.00	2110343	22.03	1449718	28.46
03 KP367-01MS	2047324	12.95	1840875	21.98	1151056	28.44
04 KP367-01MSD	2068137	13.00	1922843	22.03	1368332	28.47
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21						
22						

IS1 = FLUOROBENZENE
 IS2 (CBZ) = CHLOROBENZENE-d5
 IS3 = 1,2-DICHLOROBENZENE d4

AREA UPPER LIMIT = +100% of internal standard area
 AREA LOWER LIMIT = - 50% of internal standard area
 RT UPPER LIMIT = + 0.50 minutes of internal standard RT
 RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag values outside QC limits with an asterisk.
 * Values outside of QC limits.

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 17-JUL-2000 14:45
 End Cal Date : 17-JUL-2000 20:05
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Calibration File Names:

Level 1: /chem/msd4.i/G17msd4.b/G1740901009.d
 Level 2: /chem/msd4.i/G17msd4.b/G1740801008.d
 Level 3: /chem/msd4.i/G17msd4.b/G1740701007.d
 Level 4: /chem/msd4.i/G17msd4.b/G1740601006.d
 Level 5: /chem/msd4.i/G17msd4.b/G1740501005.d
 Level 6: /chem/msd4.i/G17msd4.b/G1740401004.d
 Level 7: /chem/msd4.i/G17msd4.b/G1740301003.d

Compound	5	10	20	50	100	150			Coefficients	m1	m2	%RSD or R^2
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b				
	200											
	Level 7											
4 Pyridine	+++++	0.96102	0.87188	0.81064	0.88659	0.90009						
	0.86351						AVRG		0.88229			5.58217
16 Aniline	+++++	1.77659	2.02360	1.72516	1.78655	1.80141						
	1.65489						AVRG		1.79470			6.92440
18 Bis(2-chloroethyl)ether	+++++	1.31601	1.34767	1.19023	1.24993	1.24482						
	1.17183						AVRG		1.25341			5.47391

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 17-JUL-2000 14:45
 End Cal Date : 17-JUL-2000 20:05
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients		%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
19 2-Chlorophenol	+++++	1.35438	1.41642	1.28130	1.33549	1.33521					
	1.25739						AVRG		1.33003		4.22156
21 1,3-Dichlorobenzene	+++++	1.65468	1.71555	1.47016	1.46318	1.46269					
	1.38915						AVRG		1.52590		8.40718
22 Phenol	+++++	1.60954	1.78710	1.50493	1.49420	1.53918					
	1.41125						AVRG		1.55770		8.31682
23 1,4-Dichlorobenzene	+++++	1.67498	1.87309	1.41467	1.53481	1.54936					
	1.44418						AVRG		1.58185		10.71574
24 1,2-Dichlorobenzene	+++++	1.59073	1.69978	1.42008	1.44740	1.44942					
	1.39979						AVRG		1.50120		7.87556



CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 17-JUL-2000 14:45
 End Cal Date : 17-JUL-2000 20:05
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients	%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
25 Benzyl Alcohol	+++++	0.56865	0.70029	0.68301	0.74020	0.71615					
	0.73642						AVRG		0.69079		9.20946
26 bis(2-Chloroisopropyl)ether	+++++	2.41240	2.49236	2.16779	2.20303	2.22668					
	2.00515						AVRG		2.25124		7.80994
28 Hexachloroethane	+++++	0.48215	0.51890	0.48950	0.56448	0.56894					
	0.52877						AVRG		0.52546		6.93297

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 17-JUL-2000 14:45
 End Cal Date : 17-JUL-2000 20:05
 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients		%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
30 2-Methylphenol	+++++	1.20472	1.22141	1.14151	1.11707	1.10730					
	1.03144						AVRG		1.13724		6.11160
31 N-Nitrosodi-n-propylamine	+++++	1.24006	1.22334	0.99775	1.07358	1.05692					
	1.01036						AVRG		1.10034		9.60707
34 4-Methylphenol	+++++	1.06613	1.38184	1.20621	1.27174	1.15584					
	1.13952						AVRG		1.20354		9.23040
37 Nitrobenzene	+++++	0.19896	0.22865	0.18883	0.19174	0.19867					
	0.19602						AVRG		0.20048		7.16275
41 Isophorone	+++++	0.73248	0.75102	0.68011	0.64788	0.64664					
	0.64485						AVRG		0.68383		6.88717



CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 17-JUL-2000 14:45
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 Quant Method : ISTD
 Target Version : 3.40
 Integrator : HP RTE
 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients		%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
42 2-Nitrophenol	+++++	0.13467	0.18084	0.18732	0.19165	0.21026					
	0.20856						AVRG		0.18555		14.84150
43 2,4-Dimethylphenol	+++++	0.30339	0.31810	0.29333	0.31268	0.31048					
	0.29699						AVRG		0.30583		3.13394
44 Bis(2-chloroethoxy)methane	+++++	0.49237	0.47574	0.42826	0.41759	0.43086					
	0.40059						AVRG		0.44090		8.04607
46 Benzoic Acid	+++++	120366	271483	632769	1888903	2787197					
	3553363						LINR	0.21443	0.24234		0.99664

CT&E Environmental Services Inc

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 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients		%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
49 1,2,4-Trichlorobenzene	+++++	0.43885	0.46448	0.39183	0.38701	0.38263					
	0.37851						AVRG		0.40722		8.75328
50 Naphthalene	---	1.31678	1.30363	1.10359	1.05662	1.02837					
	0.91359						AVRG		1.12043		14.26510
51 2,4-Dichlorophenol	+++++	0.37025	0.34794	0.36089	0.34466	0.33790					
	0.34103						AVRG		0.35044		3.58035
54 4-Chloroaniline	+++++	0.19028	0.18255	0.15768	0.15023	0.15431					
	0.14677						AVRG		0.16364		11.11615
55 Hexachlorobutadiene	+++++	0.31723	0.28421	0.25691	0.25962	0.24774					
	0.23822						AVRG		0.26732		10.80827



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INITIAL CALIBRATION DATA

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 Integrator : HP RTE
 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150		Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	200										
	Level 7										
64 2-Methylnaphthalene	+++++	0.77113	0.77985	0.71975	0.67456	0.67175					
	0.63830						AVRG		0.70922		8.11628
65 4-Chloro-3-Methylphenol	+++++	0.10411	0.08638	0.09620	0.10292	0.09813					
	0.09368						AVRG		0.09690		6.70994
69 Hexachlorocyclopentadiene	+++++	+++++	0.09340	0.16135	0.16710	0.18942					
	0.20988						AVRG		0.16423		26.80537 <
72 2,4,6-Trichlorophenol	+++++	0.46768	0.40868	0.43709	0.44495	0.43530					
	0.43660						AVRG		0.43838		4.32594

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 Target Version : 3.40
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 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients	%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
74 2-Chloronaphthalene	+++++	1.52829	1.36613	1.29451	1.27646	1.24166					
	1.16313						AVRG		1.31170		9.54560
77 2,4,5-Trichlorphenol	+++++	0.46768	0.40868	0.43709	0.44495	0.43530					
	0.43660						AVRG		0.43838		4.32594
78 2-Nitroaniline	+++++	0.32777	0.33581	0.41329	0.41779	0.41856					
	0.40912						AVRG		0.38706		11.11463
80 Dimethylphthalate	+++++	1.82908	1.75376	1.58289	1.53890	1.45500					
	1.34362						AVRG		1.58387		11.48107
81 Acenaphthylene	+++++	2.42407	2.20142	2.09058	2.01485	1.90250					
	1.64052						AVRG		2.04566		13.02652
83 2,6-Dinitrotoluene	+++++	0.23873	0.28199	0.32056	0.34189	0.34776					
	0.33676						AVRG		0.31128		13.72382


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 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150		Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
84 Acenaphthene	+++++	0.83322	0.72959	0.64083	0.64713	0.62098					
	0.59910						AVRG		0.67848		12.94443
85 3-Nitroaniline	+++++	0.28458	0.37901	0.37787	0.41320	0.41475					
	0.39987						AVRG		0.37822		12.84216
86 2,4-Dinitrophenol	+++++	+++++	0.03386	0.06747	0.07822	0.07088					
	0.08871						AVRG		0.06783		30.46031 <-
87 Dibenzofuran	+++++	2.20010	2.05535	1.84465	1.84210	1.76191					
	1.57008						AVRG		1.87903		11.80174
91 2,4-Dinitrotoluene	+++++	0.37865	0.42709	0.45438	0.49385	0.45153					
	0.46660						AVRG		0.44535		8.81523

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Compound	5	10	20	50	100	150			Coefficients	%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	200										
	Level 7										
128 Di-n-Butylphthalate	+++++	1.61530	1.58520	1.54290	1.63573	1.45038					
	1.21984						AVRG		1.50822		10.32986
133 Fluoranthene	+++++	1.59005	1.47912	1.41476	1.24694	1.19054					
	1.07324						AVRG		1.33244		14.60228
135 Benzidine	+++++	0.35631	0.49279	0.51382	0.51186	0.51875					
	0.53700						AVRG		0.48842		13.56426
136 Pyrene	+++++	1.59777	1.53849	1.37014	1.30301	1.39710					
	1.36763						AVRG		1.42902		7.95394

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Compound	5	10	20	50	100	150			Coefficients		%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	200										
	Level 7										
144 Butylbenzylphthalate	+++++	0.65999	0.72749	0.69586	0.65274	0.69355					
	0.65267						AVRG		0.68038		4.44811
147 Benzo(a)Anthracene	+++++	1.43871	1.36910	1.28011	1.17813	1.17057					
	1.14372						AVRG		1.26339		9.52428

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Compound	5	10	20	50	100	150			Coefficients	%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----	-----
	200										
	Level 7										
148 3,3'-Dichlorobenzidine	+++++	0.33206	0.40626	0.45453	0.43421	0.47489			0.42443	11.92967	
	0.44464						AVRG				
149 Chrysene	+++++	1.38501	1.33306	1.25265	1.09960	1.09608			1.19250	12.98787	
	0.98860						AVRG				
150 bis(2-ethylhexyl)Phthalate	1.05114	1.03551	1.05092	1.01311	0.91121	0.92089			0.97314	8.88913	
	0.82923						AVRG				
153 Di-n-octylphthalate	+++++	1.78155	1.95210	1.91716	1.94890	1.59002			1.75852	13.58886	
	1.36139						AVRG				

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INITIAL CALIBRATION DATA

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Compound	5	10	20	50	100	150			Coefficients	%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
154 Benzo(b)fluoranthene	+++++	1.61705	1.77378	1.40860	1.57910	1.48730					
	1.29881						AVRG		1.52744		10.93098
157 Benzo(k)fluoranthene	+++++	1.74436	1.62464	1.60089	1.61687	1.44453					
	1.37679						AVRG		1.56801		8.53655

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 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients		%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
158 Benzo(a)pyrene	+++++	1.51096	1.51463	1.36074	1.40814	1.29594					
	1.21916						AVRG		1.38493		8.49625
160 Indeno(1,2,3-cd)pyrene	+++++	1.54325	1.47813	1.36713	1.52932	1.41531					
	1.38071						AVRG		1.45231		5.20935
161 Dibenzo(a,h)anthracene	+++++	1.23542	1.18804	1.13107	1.24892	1.15308					
	1.12273						AVRG		1.17987		4.53025


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INITIAL CALIBRATION DATA

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 Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
 Cal Date : 18-Jul-2000 11:18 tjh

Compound	5	10	20	50	100	150			Coefficients	%RSD	
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7										
162 Benzo(g,h,i)perylene	+++++	0.86848	1.26072	1.15005	1.19863	1.14691					
	1.12444						AVRG		1.12487		11.97691
M 173 Total Cresols	+++++	2.27085	2.60326	2.34772	2.38881	2.26314					
	2.17096						AVRG		2.34079		6.36544
\$ 9 2-Fluorophenol	+++++	1.17714	1.08470	1.06638	1.01850	1.13758					
	1.15787						AVRG		1.10703		5.48296
\$ 20 Phenol-d5	+++++	1.95469	1.58598	1.36848	1.39052	1.48775					
	1.45953						AVRG		1.54116		14.06831

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Compound	5	10	20	50	100	150		Coefficients			%RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	Curve	b	m1	m2	or R^2
	200										
	Level 7					
\$ 36 Nitrobenzene-d5	+++++	0.20517	0.19288	0.17690	0.17730	0.20233					
	0.19857						AVRG		0.19219		6.44937
\$ 73 2-Fluorobiphenyl	+++++	1.81152	1.49343	1.37753	1.77104	1.48516					
	1.31943						AVRG		1.54302		13.19504
\$ 106 2,4,6-Tribromophenol	+++++	0.13983	0.14944	0.13622	0.13053	0.15460					
	0.15556						AVRG		0.14436		7.15904
\$ 126 O-Terphenyl	+++++	0.81586	0.70643	0.65931	0.83314	0.67377					
	0.65263						AVRG		0.72352		11.13620
\$ 172 p-terphenyl	+++++	1.14809	0.99181	0.96111	0.76481	0.88886					
	0.82788						AVRG		0.93043		14.55989

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Method file : /chem/msd4.i/G17msd4.b/8270C_G3.m
Cal Date : 18-Jul-2000 11:18 tjh

Curve	Formula	Units
Averaged	Amt = Rsp/m1	Response
Linear	Amt = b + Rsp/m1	Response
Quad	Amt = b + m1*Rsp + m2*Rsp^2	Response

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INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Calibration File Names:

Level 1: /chem/msd3.i/K17msd3.b/K170801008.d
 Level 2: /chem/msd3.i/K17msd3.b/K170701007.d
 Level 3: /chem/msd3.i/K17msd3.b/K170501005.d
 Level 4: /chem/msd3.i/K17msd3.b/K170401004.d
 Level 5: /chem/msd3.i/K17msd3.b/K170301003.d
 Level 6: /chem/msd3.i/K17msd3.b/K170901009.d
 Level 7: /chem/msd3.i/K17msd3.b/K170601006.d

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75								
	Level 7								
4 Pyridine	+ 0.66099	1.01408	1.15158	1.09763	1.16500	+++++			
	1.13872							1.03800	18.553
16 Aniline	1.34582	1.51023	1.60768	1.42618	1.44492	1.59465			
	1.56499							1.49921	6.509
18 Bis(2-chloroethyl)ether	1.09095	1.20380	1.28396	1.42811	1.32413	1.45495			
	1.28969							1.29651	9.666
19 2-Chlorophenol	1.20784	1.17502	1.22796	1.13069	1.07173	1.02993			
	1.17585							1.14557	6.325
21 1,3-Dichlorobenzene	1.53634	1.47054	1.43881	1.46229	1.30171	1.39256			
	1.47519							1.43963	5.177
22 Phenol	1.38960	1.59078	1.63874	1.86693	1.75824	1.80878			
	1.66945							1.67465	9.490
23 1,4-Dichlorobenzene	1.51904	1.54494	1.49678	1.48394	1.38581	1.34099			
	1.53049							1.47171	5.285
24 1,2-Dichlorobenzene	1.34351	1.40501	1.39236	1.40354	1.30924	1.28080			
	1.46771							1.37174	4.680

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
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 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	'RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			
	75								
Level 7									
25 Benzyl Alcohol	0.55620	0.71794	0.81156	0.74121	0.65366	0.56850			
	0.74008							0.68416	13.922
26 bis(2-Chloroisopropyl)ether	1.22290	1.34667	1.33168	1.20327	1.31676	1.62180			
	1.31972							1.33754	10.253
28 Hexachloroethane	0.52030	0.52214	0.53951	0.52538	0.51635	0.43017			
	0.54086							0.51353	7.389
30 2-Methylphenol	1.04627	1.09458	1.14163	1.09870	1.24044	1.25740			
	1.15832							1.14819	6.773
31 N-Nitrosodi-n-propylamine	0.67946	0.83183	0.90967	0.87038	1.01730	0.86800			
	0.87344							0.86430	11.649
34 4-Methylphenol	1.08311	1.19999	1.27331	1.31007	1.38752	1.40064			
	1.29492							1.27851	8.594
37 Nitrobenzene	0.16236	0.20026	0.19835	0.20014	0.18444	0.11623			
	0.19556							0.17962	17.296
41 Isophorone	0.52040	0.58096	0.58794	0.56570	0.53977	0.46947			
	0.57265							0.54813	7.668

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INITIAL CALIBRATION DATA

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 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75						—		
Level 7							—		
42 2-Nitrophenol	0.16603	0.18922	0.19621	0.21885	0.20275	0.11859			
	0.20004							0.18453	17.972
43 2,4-Dimethylphenol	0.25017	0.26782	0.30238	0.30080	0.27868	0.21794			
	0.29048							0.27261	11.159
44 Bis(2-chloroethoxy)methane	0.37797	0.37418	0.37792	0.37749	0.35469	0.29862			
	0.37784							0.36267	8.129
46 Benzoic Acid	0.19157	0.18487	0.20272	0.20607	0.22118	0.13308			
	0.19187	.						0.19019	14.658
49 1,2,4-Trichlorobenzene	0.38863	0.38334	0.35007	0.37325	0.32075	0.34175			
	0.35962							0.35963	6.727
50 Naphthalene	1.03756	1.04319	1.02141	0.97498	0.92556	0.95814			
	1.08227							1.00616	5.468
51 2,4-Dichlorophenol	0.32242	0.32310	0.31381	0.31914	0.28570	0.24512			
	0.34278		.					0.30744	10.500
54 4-Chloroaniline	0.42471	0.40876	0.42966	0.44786	0.42344	0.31523			
	0.44610							0.41368	10.993
55 Hexachlorobutadiene	0.13953	0.16941	0.16884	0.16199	0.15725	0.20187			
	0.16436							0.16618	11.263

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75						—		
Level 7							—		
64 2-Methylnaphthalene	0.55408	0.58488	0.59253	0.59112	0.51881	0.50683			
	0.56696							0.55932	6.215
65 4-Chloro-3-Methylphenol	0.08106	0.08514	0.08830	0.08627	0.09099	0.06683			
	0.09067							0.08418	9.959
69 Hexachlorocyclopentadiene	+++++	0.31043	0.34623	0.34857	0.39496	+++++			
	0.32177							0.34439	9.457
72 2,4,6-Trichlorophenol	0.30543	0.38201	0.40576	0.37571	0.40476	0.38136			
	0.38019		.					0.37646	8.926
74 2-Chloronaphthalene	1.18822	1.16052	1.05704	1.08031	1.08074	1.21963			
	1.05602							1.12035	6.031

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75								
	Level 7								
77 2,4,5-Trichlorphenol	0.36327	0.37340	0.40747	0.39234	0.41877	0.34566			
	0.36074							0.38024	7.027
78 2-Nitroaniline	0.20757	0.28874	0.31805	0.34998	0.35062	+++++			
	0.31407							0.30484	17.429
80 Dimethylphthalate	1.44016	1.42223	1.30294	1.34648	1.35780	1.46472			
	1.35290							1.38389	4.251
81 Acenaphthylene	1.85454	1.91121	1.74640	1.71432	1.74671	1.91408			
	1.77417							1.80878	4.600
83 2,6-Dinitrotoluene	0.16005	0.24547	0.25841	0.28203	0.28091	0.19848			
	0.25474							0.24001	18.743
84 Acenaphthene	0.59729	0.59365	0.55714	0.53799	0.53855	0.67585			
	0.53745							0.57685	8.788

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—	
	75						—	
Level 7							—	
85 3-Nitroaniline	0.18574	0.28376	0.29341	0.31930	0.30350	+++++		
	0.31559						0.28355	17.539
86 2,4-Dinitrophenol	+++++	0.10698	0.14045	0.15445	0.17679	+++++		
	0.13874						0.14348	17.748
87 Dibenzofuran	1.70394	1.61716	1.48139	1.50669	1.50748	1.66885		
	1.50796						1.57050	5.786
91 2,4-Dinitrotoluene	0.27574	0.36911	0.36467	0.40314	0.40508	0.24812		
	0.37374						0.34851	17.719
94 Fluorene	1.42220	1.32902	1.19789	1.22872	1.28178	1.37113		
	1.24450						1.29646	6.272
95 4-Nitrophenol	+++++	0.14320	0.14649	0.16622	0.20179	+++++		
	0.13981						0.15950	16.156<-

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	---	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6			
	75								
	Level 7								
96 Diethylphthalate	1.35185	1.34926	1.19831	1.23175	1.28279	1.32130			
	1.22881						1.28058	4.865	
97 4-Chlorophenyl-phenylether	0.78037	0.73974	0.66198	0.67557	0.70509	0.76973			
	0.70002						0.71893	6.339	
101 4,6-Dinitro-2-methylphenol	0.10455	0.12900	0.15391	0.17761	0.17185	+++++			
	0.15438						0.14855	18.480	
103 N-Nitrosodiphenylamine	0.45838	0.55574	0.52800	0.51279	0.50026	0.59902			
	0.51978						0.52485	8.399	
104 1,2-Diphenylhydrazine	0.66350	0.73803	0.69490	0.69388	0.71202	0.81306			
	0.67762						0.71329	7.017	
105 4-Nitroaniline	0.12690	0.19271	0.23768	0.21056	0.19925	+++++			
	0.22353						0.19844	19.474	

CTE

250

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	75							
Level 7								
109 Phorate	0.29080	0.40818	0.42311	0.40713	0.39377	+++++		
	+++++						0.38460	13.899<-
110 4-Bromophenyl-phenylether	0.21546	0.26043	0.24991	0.23794	0.24827	0.27141		
	0.24694						0.24719	7.128
111 t-Diallate	0.10118	0.11112	0.11654	0.11231	0.10393	+++++		
	+++++						0.10901	5.786<-
114 Hexachlorobenzene	0.24951	0.28806	0.29968	0.26253	0.26793	0.34706		
	0.28033						0.28501	11.237
117 Pentachlorophenol	+++++	0.15301	0.16757	0.16439	0.17983	+++++		
	0.15558						0.16408	6.502
120 Phenanthrene	1.23701	1.16379	1.17983	1.18284	1.04189	1.13841		
	1.18871						1.16178	5.221
121 Anthracene	1.21193	1.15926	1.15405	1.16093	1.03327	1.08806		
	1.16826						1.13939	5.200
124 Carbazole	1.34867	0.97441	1.25242	0.87346	0.97964	+++++		
	+++++						1.08572	18.742<-
128 Di-n-Butylphthalate	0.86562	1.20363	1.19674	1.20771	1.17023	1.05620		
	1.16380						1.12342	11.125

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75								
	Level 7								
133 Fluoranthene	1.24172	1.24797	1.23914	1.23821	1.13359	1.05892			
	1.28445							1.20629	6.615
135 Benzidine	+++++	0.16870	0.21359	0.21212	0.25566	+++++			
	+++++							0.21252	16.708
136 Pyrene	1.31771	1.26331	1.27371	1.27507	1.16270	1.11357			
	1.32894							1.24786	6.410
144 Butylbenzylphthalate	+++++	0.57745	0.61181	0.60542	0.66352	0.40227			
	0.59345							0.57565	15.595
147 Benzo(a)Anthracene	1.22320	1.27748	1.22426	1.28851	1.16761	1.07690			
	1.24939							1.21534	6.005

CTE

252

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75								
	Level 7								
148 3,3'-Dichlorobenzidine	+++++	0.16648	0.24817	0.22570	0.23021	+++++			
	+++++							0.21764	16.294 <-
149 Chrysene	1.31458	1.30403	1.26026	1.28785	1.16184	1.29816			
	1.25513							1.26884	4.103
150 bis(2-ethylhexyl)Phthalate	+++++	0.81493	0.81931	0.86538	0.90886	0.59288			
	0.87630							0.81294	13.964
153 Di-n-octylphthalate	+++++	1.88033	1.68589	1.74825	1.46047	1.45963			
	1.78569							1.67004	10.446
154 Benzo(b)fluoranthene	1.10712	1.68774	1.53766	1.46860	1.67723	1.42025			
	1.74205							1.52009	14.351
157 Benzo(k)fluoranthene	1.86435	2.10296	2.21282	2.02632	2.03389	2.24620			
	1.89687							2.05477	7.063
158 Benzo(a)pyrene	1.31389	1.51542	1.50352	1.38535	1.41421	1.45332			
	1.48280							1.43836	5.019
160 Indeno(1,2,3-cd)pyrene	0.65209	1.08236	0.99050	0.97365	1.12373	0.98938			
	0.94197							0.96481	15.761
161 Dibenzo(a,h)anthracene	0.75235	1.21032	1.00742	1.07469	1.14983	0.90264			
	0.97959							1.01098	15.254

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	75							
	Level 7							
162 Benzo(g,h,i)perylene	0.85392	1.30531	1.04693	1.05735	1.25829	1.06600		
	1.06188						1.09281	13.708
163 Coronene	0.11895	0.17567	+++++	0.17283	0.18830	+++++		
	+++++						0.16394	18.749
176 Dibenzo[a,e]fluoranthrene	+++++	0.39725	+++++	+++++	+++++	+++++		
	+++++						0.39725	0.000
177 5-Methylchrysene	+++++	0.44229	+++++	+++++	+++++	+++++		
	+++++						0.44229	0.000
\$ 185 p-Terphenyl	1.00939	1.10563	1.04188	1.00142	0.96914	0.93157		
	0.95605						1.00215	5.838

254

CTE

INITIAL CALIBRATION DATA

Start Cal Date : 12-DEC-1995 19:14
 End Cal Date : 17-NOV-2000 23:28
 Quant Method : ISTD
 Target Version : 3.10
 Integrator : HP RTE
 Method file : /chem/msd3.i/K17msd3.b/8270jerT.m
 Cal Date : 18-Nov-2000 11:22 jer
 Curve Type : Average

Compound	20	50	100	150	200	10	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	75								
	Level 7								
\$ 9 2-Fluorophenol	0.97611	1.03056	1.10492	1.09263	1.46679	1.07956			
	0.86283							1.08763	17.216
M 193 Total Cresols	+++++	+++++	+++++	+++++	+++++	+++++			
	+++++							+++++	+++++ <-
\$ 20 Phenol-d5	1.47178	1.42509	1.38329	1.50876	1.20650	1.36453			
	1.42690							1.39812	6.989
\$ 36 Nitrobenzene-d5	+++++	0.15056	0.15720	0.16752	0.16907	0.11561			
	0.10541							0.14423	18.844
\$ 73 2-Fluorobiphenyl	1.09166	1.24658	1.18176	1.20610	1.16324	1.51869			
	0.87125							1.18275	16.307
\$ 106 2,4,6-Tribromophenol	0.12172	0.14794	0.15368	0.16114	0.15359	0.14098			
	0.10038							0.13992	15.401
\$ 126 O-Terphenyl	0.69096	0.66973	0.63289	0.65550	0.61446	0.65499			
	0.61961							0.64830	4.262

SEMIVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

255

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Lab File ID: K2740101001 DFTPP Injection Date: 11/27/0

Instrument ID: MSD4 DFTPP Injection Time: 1216

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	59.7
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	1.0 - 100.0% of mass 198	76.9
70	Less than 2.0% of mass 69	0.0 (0.0)1
127	40.0 - 60.0% of mass 198	53.2
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	7.0
275	10.0 - 30.0% of mass 198	23.8
365	1.0 - 100.0% of mass 198	3.2
441	Present, but less than mass 443	15.4
442	40.0 - 100.0% of mass 198	94.9
443	17.0 - 23.0% of mass 442	16.2 (17.0)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

	EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01	CCAL	CCAL	K2740201002	11/27/0	1233
02	KX1-662	OK0X001662	K2740301003	11/27/0	1324
03	KP367-7	OK0P367007	K2740401004	11/27/0	1418
04	KP367-8	OK0P367008	K2740501005	11/27/0	1512
05	KP367-1	OK0P367001	K2740601006	11/27/0	1606
06	KP367-4	OK0P367004	K2740701007	11/27/0	1701
07	KP367-1MS	OK0P367009	K2740801008	11/27/0	1755
08	KP367-1MSD	OK0P367010	K2740901009	11/27/0	1849
09	KX1-662MS	OK0X001663	K2741001010	11/27/0	1943
10					
11					
12					
13					
14					
15					
16					
17					
18					
19					
20					
21					
22					

7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

256

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Instrument ID: MSD4 Calibration Date: 11/27/0 Time: 1233

Lab File ID: K2740201002 Init. Calib. Date(s): 07/17/0 07/17/0

Init. Calib. Times: 1445 2005

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Aniline	82.1	100	AVRG	17.9	25.0
Phenol	107	100	AVRG	-7.0	20.0
Bis(2-chloroethyl)ether	107	100	AVRG	-7.0	25.0
2-Chlorophenol	108	100	AVRG	-8.0	25.0
1,3-Dichlorobenzene	88.6	100	AVRG	11.4	25.0
1,4-Dichlorobenzene	95.9	100	AVRG	4.1	20.0
Benzyl Alcohol	112	100	AVRG	-12.0	25.0
1,2-Dichlorobenzene	90.3	100	AVRG	9.7	25.0
2-Methylphenol	96.0	100	AVRG	4.0	25.0
bis(2-Chloroisopropyl)ether	81.4	100	AVRG	18.6	25.0
4-Methylphenol	102	100	AVRG	-2.0	25.0
Hexachloroethane	120	100	AVRG	-20.0	25.0
Nitrobenzene	107	100	AVRG	-7.0	25.0
Isophorone	120	100	AVRG	-20.0	25.0
2-Nitrophenol	104	100	AVRG	-4.0	25.0
2,4-Dimethylphenol	109	100	AVRG	-9.0	25.0
Bis(2-chloroethoxy)methane	114	100	AVRG	-14.0	25.0
Benzoic Acid	95.1	100	LINR	4.9	25.0
2,4-Dichlorophenol	98.0	100	AVRG	2.0	20.0
1,2,4-Trichlorobenzene	91.0	100	AVRG	9.0	25.0
Naphthalene	92.3	100	AVRG	7.7	25.0
4-Chloroaniline	86.2	100	AVRG	13.8	25.0
Hexachlorobutadiene	82.3	100	AVRG	17.7	20.0
4-Chloro-3-Methylphenol	105	100	AVRG	-5.0	20.0
2-Methylnaphthalene	98.2	100	AVRG	1.8	25.0
Hexachlorocyclopentadiene	194	100	AVRG	-94.0	25.0 <-
2,4,6-Trichlorophenol	95.9	100	AVRG	4.1	20.0
2,4,5-Trichlorophenol	95.5	100	AVRG	4.5	25.0
2-Chloronaphthalene	94.4	100	AVRG	5.6	25.0
2-Nitroaniline	102	100	AVRG	-2.0	25.0
Acenaphthylene	95.4	100	AVRG	4.6	25.0
2,6-Dinitrotoluene	112	100	AVRG	-12.0	25.0
3-Nitroaniline	114	100	AVRG	-14.0	25.0
Acenaphthene	86.4	100	AVRG	13.6	20.0
2,4-Dinitrophenol	234	100	AVRG	-99.9	25.0 <-
Dibenzofuran	96.3	100	AVRG	3.7	25.0
4-Nitrophenol	118	100	AVRG	-18.0	20.0

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

257

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Instrument ID: MSD4 Calibration Date: 11/27/0 Time: 1233

Lab File ID: K2740201002 Init. Calib. Date(s): 07/17/0 07/17/0

Init. Calib. Times: 1445 2005

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
2,4-Dinitrotoluene	99.7	100	AVRG	0.3	25.0
Fluorene	88.1	100	AVRG	11.9	25.0
Dimethylphthalate	108	100	AVRG	-8.0	25.0
Diethylphthalate	110	100	AVRG	-10.0	25.0
4-Chlorophenyl-phenylether	91.0	100	AVRG	9.0	25.0
4-Nitroaniline	93.1	100	AVRG	6.9	25.0
4,6-Dinitro-2-methylphenol	116	100	2ORDR	-16.0	25.0
N-Nitrosodiphenylamine(1)	103	100	AVRG	-3.0	20.0
1,2-Diphenylhydrazine	120	100	AVRG	-20.0	25.0
4-Bromophenyl-phenylether	103	100	AVRG	-3.0	25.0
Hexachlorobenzene	98.8	100	AVRG	1.2	25.0
Pentachlorophenol	119	100	AVRG	-19.0	20.0
Phenanthrone	105	100	AVRG	-5.0	25.0
Anthracene	105	100	AVRG	-5.0	25.0
Di-n-Butylphthalate	106	100	AVRG	-6.0	25.0
Fluoranthene	109	100	AVRG	-9.0	20.0
Benzidine	2.05	100	AVRG	98.0	25.0
Pyrene	80.3	100	AVRG	19.7	25.0
Butylbenzylphthalate	97.8	100	AVRG	2.2	25.0
Benzo(a)Anthracene	96.5	100	AVRG	3.5	25.0
3,3'-Dichlorobenzidine	88.6	100	AVRG	11.4	25.0
Chrysene	106	100	AVRG	-6.0	25.0
bis(2-ethylhexyl)Phthalate	92.4	100	AVRG	7.6	25.0
Di-n-octylphthalate	82.0	100	AVRG	18.0	20.0
Benzo(b)fluoranthene	89.2	100	AVRG	10.8	25.0
Benzo(k)fluoranthene	91.4	100	AVRG	8.6	25.0
Benzo(a)pyrene	91.7	100	AVRG	8.3	20.0
Indeno(1,2,3-cd)pyrene	115	100	AVRG	-15.0	25.0
Dibenzo(a,h)anthracene	113	100	AVRG	-13.0	25.0
Benzo(g,h,i)perylene	122	100	AVRG	-22.0	25.0
Carbazole	107	100	AVRG	-7.0	25.0
Pyridine	122	100	AVRG	-22.0	25.0
N-Nitrosodi-n-propylamine	107	100	AVRG	-7.0	25.0
Total Cresols	198	100	AVRG	-98.0	25.0
2-Fluorophenol	110	100	AVRG	-10.0	25.0

(1) Cannot be separated from Diphenylamine

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

253

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Instrument ID: MSD4 Calibration Date: 11/27/0 Time: 1233

Lab File ID: K2740201002 Init. Calib. Date(s): 07/17/0 07/17/0

Init. Calib. Times: 1445 2005

COMPOUND	SAMPLE AMOUNT	CAL100 AMOUNT	CURVE	%D	MAX %d
Phenol-d5	99.6	100	AVRG	0.4	25.0
Nitrobenzene-d5	95.2	100	AVRG	4.8	25.0
2-Fluorobiphenyl	80.4	100	AVRG	19.6	25.0
2,4,6-Tribromophenol	118	100	AVRG	-18.0	25.0
O-Terphenyl	87.2	100	AVRG	12.8	25.0
p-terphenyl	93.5	100	AVRG	6.5	25.0

01/26/01 14:56

Form IV

CTEES: Charleston Batch Log

250

Batch Number: 32783 Type: X On: 11/21/00 By: dam Prep Method: XOX-3510BBNA Instrument:

Original

Posted and Certified On: 11/21/00 By: dam Signed: _____

Lab Number	Type Notes	PG Group	Date	Time	By	Dil Fact	DT
TA0-K0-P323-035	L	XOA-T-8270-001	11/20/00	12:00 AR		1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P323-036	LMS	XOA-T-8270-001-LMS				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P353-003	L	XOA-T-8270-001				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P353-004	L	XOA-T-8270-001				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P367-002	L	XOA-T-8270-001				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P367-003	LMS	XOA-T-8270-001-LMS				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P367-005	L	XOA-T-8270-001				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P367-007	L	XOA-T-8270-001				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P367-008	LMS	XOA-T-8270-001-LMS				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P370-002	L	XOA-T-8270-001				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-P370-003	LMS	XOA-T-8270-001-LMS				1.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		
TA0-K0-X001-643	MB	XOA-T-8270-001-MB				0.00	
		S: 200.0000 ml	E:	1.0000 ml	P:		

Received prepared samples for analysis Signed: _____

Data File: K2740301003.d
Report Date: 08-Jan-2001 14:23

Page 1

CT&E Environmental Services Inc

SEMIVOLATILE REPORT BNA

Data file : /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K27msd4.b/K2740301003.d
Lab Smp Id: 0K0X001662 Client Smp ID: KX1-662
Inj Date : 27-NOV-2000 13:24
Operator : tjh Inst ID: msd4.i
Smp Info : K0-X001-662 MB 30.5g->1.0mls K21 BNA
Misc Info :
Comment :
Method : /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K27msd4.b/8270C_G3.m
Meth Date : 08-Jan-2001 13:55 bly Quant Type: ISTD
Cal Date : 17-JUL-2000 14:45 Cal File: G1740301003.d
Als bottle: 3 QC Sample: BLANK
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: XOATCL8270.sub
Target Version: 3.40 Sample Matrix: SOIL
Processing Host: ctegc1

Concentration Formula: Amt * DF * (vf/vi) * (100/S) * 1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	1.000	Final Volume (mL)
Vi	30.500	Initial Volume (grams)
S	100.000	% Total Solids

CONCENTRATIONS

ON-COL FINAL

* 1 1,4-Dichlorobenzene-d4	CAS #: 3855-82-1
11.128 11.124 (1.000) 152 1309507 40.0000	80.00- 120.00 100.00 (Q)
11.128 11.124 (1.000) 150 1977228	174.24- 214.24 150.99
11.128 11.108 (1.000) 115 825339	49.49- 89.49 63.03

\$ 126 O-Terphenyl	CAS #:	84-15-1	
24.459 24.457 (1.050)	230 8023181 80.8421	2650 80.00- 120.00	100.00
24.459 24.457 (1.050)	229 4921636	43.89- 83.89	61.34
24.459 24.457 (1.050)	231 1415365	0.00- 36.73	17.64

RT	EXP RT	(REL RT)	MASS	CONCENTRATIONS		TARGET RANGE	RATIO	
				ON-COL	FINAL			
\$ 20 Phenol-d5				CAS #:	4165-62-2			
10.574	10.571	(0.950)	99	4338414	85.9876	2820	80.00- 120.00	100.00
10.574	10.571	(0.950)	71	2125656		32.10-	72.10	49.00

* 35 Naphthalene-d8				CAS #:	1146-65-2			
14.805	14.805	(1.000)	136	4445753	40.0000	80.00-	120.00	100.00
14.805	14.789	(1.000)	68	321755		0.00-	25.23	7.24

\$ 36 Nitrobenzene-d5				CAS #:	4165-60-0			
12.918	12.899	(0.872)	128	1491875	69.8411	2290	80.00- 120.00	100.00
12.901	12.899	(0.871)	82	4021569		231.67-	271.67	269.56
12.901	12.899	(0.871)	54	2207747		133.84-	173.84	147.98

* 66 Acenaphthene-d10				CAS #:	15067-26-2			
19.526	19.531	(1.000)	164	2891684	40.0000	80.00-	120.00	100.00
19.526	19.531	(1.000)	162	2939582		74.93-	114.93	101.66
19.526	19.531	(1.000)	160	1301680		24.77-	64.77	45.01

\$ 73 2-Fluorobiphenyl				CAS #:	321-60-8			
17.833	17.819	(0.913)	172	6727308	60.3086	1980	80.00- 120.00	100.00
17.833	17.819	(0.913)	171	2437171		13.52-	53.52	36.23

* 98 Phenanthrene-d10				CAS #:	1517-22-2			
23.303	23.299	(1.000)	188	5486774	40.0000	80.00-	120.00	100.00
23.303	23.315	(1.000)	94	459214		0.00-	28.86	8.37
23.303	23.299	(1.000)	80	644103		0.00-	32.86	11.74

* 134 Chrysene-d12				CAS #:	1719-03-5			
30.087	30.092	(1.000)	240	5920300	40.0000	80.00-	120.00	100.00
30.087	30.092	(1.000)	120	599030		0.00-	30.74	10.12
30.087	30.092	(1.000)	236	1515858		4.83-	44.83	25.60

* 151 Perylene-d12				CAS #:	1520-96-3			
34.007	34.000	(1.000)	264	5994592	40.0000	80.00-	120.00	100.00
34.007	34.017	(1.000)	260	1411586		1.17-	41.17	23.55
34.007	34.017	(1.000)	265	1348304		2.08-	42.08	22.49

\$ 106 2,4,6-Tribromophenol				CAS #:	118-79-6			
21.626	21.635	(0.928)	330	1842916	93.0660	3050	80.00- 120.00	100.00
21.626	21.619	(0.928)	141	713615		20.82-	60.82	38.72

\$ 172 p-terphenyl				CAS #:	1718-51-0			
27.457	27.443	(0.913)	244	13024008	94.5754	3100	80.00- 120.00	100.00
27.441	27.443	(0.912)	122	1516616		0.00-	31.43	11.64
27.457	27.460	(0.913)	212	1025882		0.00-	29.29	7.88

CT&E Environmental Services Inc

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd4.i
Lab File ID: K2740301003.d
Lab Smp Id: 0K0X001662
Analysis Type: SV
Quant Type: ISTD
Operator: tjh
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K27msd4.b/8270C_G3.m
Misc Info:

Calibration Date: 27-NOV-2000
Calibration Time: 12:33
Client Smp ID: KX1-662
Level: LOW
Sample Type: SOIL

COMPOUND	STANDARD	AREA LIMIT	SAMPLE	%DIFF
		LOWER	UPPER	
1 1,4-Dichlorobenze	955633	477816	1911266	1309507 37.03
35 Naphthalene-d8	3249136	1624568	6498272	4445753 36.83
66 Acenaphthene-d10	1992445	996222	3984890	2891684 45.13
98 Phenanthrene-d10	3585167	1792584	7170334	5486774 53.04
134 Chrysene-d12	4138362	2069181	8276724	5920300 43.06
151 Perylene-d12	4285221	2142610	8570442	5994592 39.89

COMPOUND	STANDARD	RT LIMIT	SAMPLE	%DIFF
		LOWER	UPPER	
1 1,4-Dichlorobenze	11.12	10.62	11.62	11.13 0.03
35 Naphthalene-d8	14.80	14.30	15.30	14.81 0.00
66 Acenaphthene-d10	19.53	19.03	20.03	19.53 -0.02
98 Phenanthrene-d10	23.30	22.80	23.80	23.30 0.02
134 Chrysene-d12	30.09	29.59	30.59	30.09 -0.02
151 Perylene-d12	34.00	33.50	34.50	34.01 0.02

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

263
C:\Q\Q\Q\Q\Q\Q

CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: K27msd4
Sample Matrix: SOLID Fraction: SV
Lab Smp Id: OK0X001662 Client Smp ID: KX1-662
Level: LOW Operator: tjh
Data Type: MS DATA SampleType: BLANK
SpikeList File: LCSsoilPNA.spk Quant Type: ISTD
Sublist File: X0ATCL8270.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K27msd4.b/8270C_G3.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 126 O-Terphenyl	3280	2650	80.84	0-137
\$ 9 2-Fluorophenol	3280	2610	79.66	25-121
\$ 20 Phenol-d5	3280	2820	85.99	24-113
\$ 36 Nitrobenzene-d5	3280	2290	69.84	23-120
\$ 73 2-Fluorobiphenyl	3280	1980	60.31	30-115
\$ 106 2,4,6-Tribromophen	3280	3050	93.07	19-122
\$ 172 p-terphenyl	3280	3100	94.58	18-137

CT&E Environmental Services Inc

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 0K0X001662
Sample Location:
Sample Date:
Sample Matrix: SOIL
Analysis Type: SV
Data Type: MS DATA
Misc Info:

Client SDG: K27msd4
Client Smp ID: KX1-662
Sample Point:
Date Received:
Quant Type: ISTD
Level: LOW
Operator: tjh

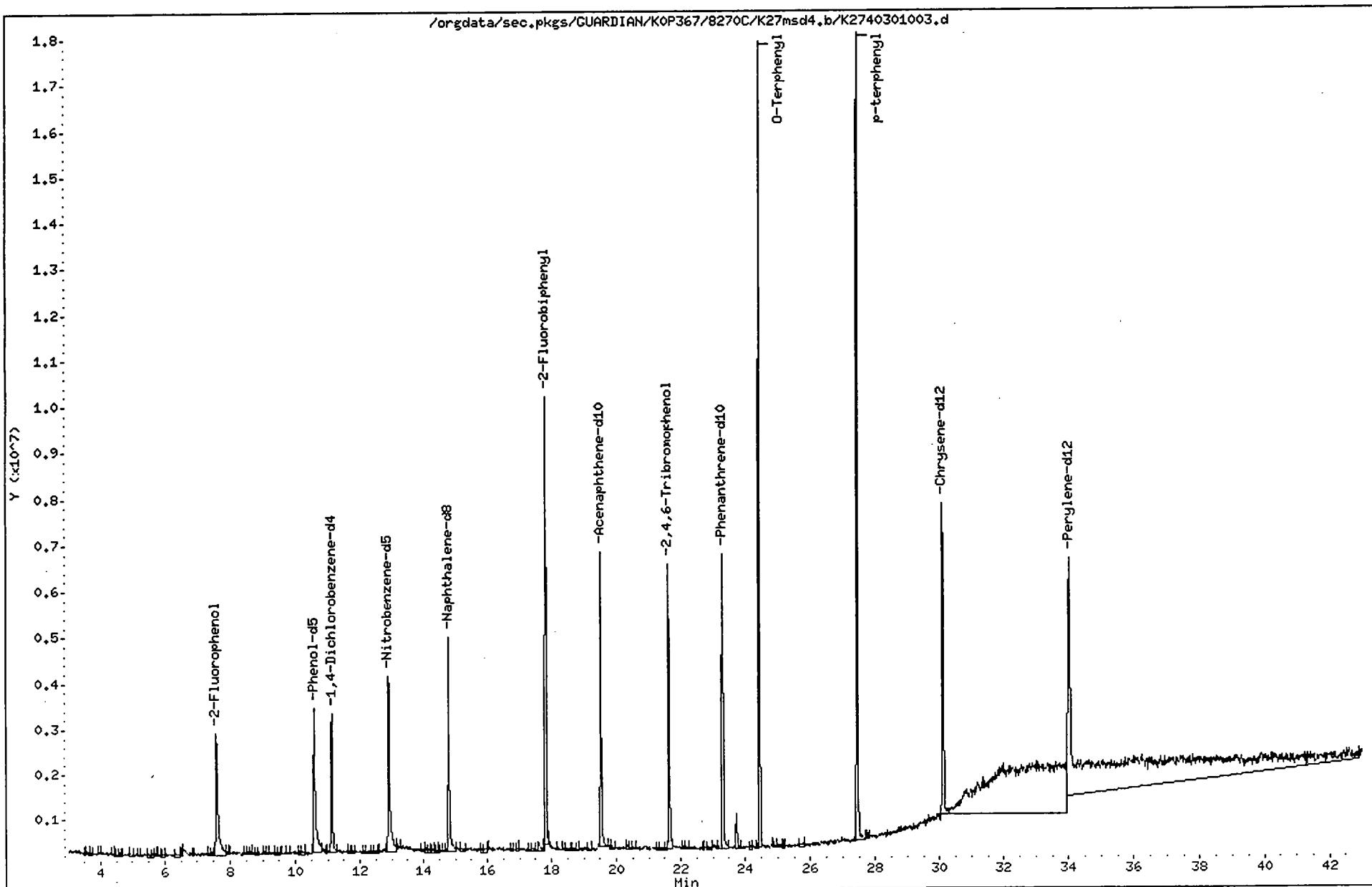
CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg Q

CAS NO.	COMPOUND	ug/Kg	Q
84-15-1-----	O-Terphenyl	2650	
367-12-4-----	2-Fluorophenol	2610	
4165-62-2-----	Phenol-d5	2820	
4165-60-0-----	Nitrobenzene-d5	2290	
321-60-8-----	2-Fluorobiphenyl	1980	
118-79-6-----	2,4,6-Tribromophenol	3050	
1718-51-0-----	p-terphenyl	3100	

Chrysene

Data File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8270C/K27msd4.b/K2740301003.d
Date : 27-NOV-2000 13:24
Client ID: KX1-662
Sample Info: K0-X001-662 MB 30.5g->1.0mls K21 BNA
Volume Injected (μ L): 30.5
Column phase: XTI-5

Instrument: msd4.i

Operator: tjh
Column diameter: 0.25

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

26

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Matrix Spike - EPA Sample No.: KX1-662 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	3320	0.000	2490	75	30- 90
2-Chlorophenol	3320	0.000	2200	66	25-100
1,4-Dichlorobenzene	1660	0.000	1100	66	30-100
1,2,4-Trichlorobenzene	1660	0.000	1190	72	40-105
4-Chloro-3-Methylphenol	3320	0.000	2190	66	30-100
Acenaphthene	1660	0.000	1420	86	35-135
4-Nitrophenol	3320	0.000	3480	105	15-110
2,4-Dinitrotoluene	1660	0.000	1220	73	30- 85
Pentachlorophenol	3320	0.000	1940	58	20-105
Pyrene	1660	0.000	1360	82	35-140
N-Nitrosodi-n-propylami	1660	0.000	1580	95	45-125

Column to be used to flag recovery and RPD values with an asterisk
* Values outside of QC limits

RPD: 0 out of 0 outside limits

Spike Recovery: 0 out of 11 outside limits

COMMENTS: LQS

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

267

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Matrix Spike - EPA Sample No.: KP367-1 Level: (low/med) LOW

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Phenol	3240	0.000	2100	65	26- 90
2-Chlorophenol	3240	0.000	1890	58	25-102
1,4-Dichlorobenzene	1620	0.000	785	48	28-104
1,2,4-Trichlorobenzene	1620	0.000	859	53	38-107
4-Chloro-3-Methylphenol	3240	0.000	2240	69	26-103
Acenaphthene	1620	44.1	1030	61	31-137
4-Nitrophenol	3240	0.000	2550	79	11-114
2,4-Dinitrotoluene	1620	0.000	970	60	28- 89
Pentachlorophenol	3240	497	3060	79	17-109
Pyrrene	1620	328	1540	75	35-142
N-Nitrosodi-n-propylami	1620	0.000	883	54	41-126

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC RPD	LIMITS REC.
Phenol	3290	3160	96*	38*	35	26- 90
2-Chlorophenol	3290	2910	88	41	50	25-102
1,4-Dichlorobenzene	1640	1230	75	44*	27	28-104
1,2,4-Trichlorobenzene	1640	1140	70	28*	23	38-107
4-Chloro-3-Methylphenol	3290	2760	84	20	33	26-103
Acenaphthene	1640	1760	105	53*	19	31-137
4-Nitrophenol	3290	3420	104	27	50	11-114
2,4-Dinitrotoluene	1640	1040	63	5	47	28- 89
Pentachlorophenol	3290	3170	81	2	47	17-109
Pyrrene	1640	3030	165*	75*	36	35-142
N-Nitrosodi-n-propylami	1640	1530	93	53*	38	41-126

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 6 out of 11 outside limits

Spike Recovery: 2 out of 22 outside limits

COMMENTS: Leachate Matrix Spike

3C
WATER SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

268
QA/QC

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Matrix Spike - EPA Sample No.: KP367-8

COMPOUND	SPIKE ADDED (ug/L)	SAMPLE CONCENTRATION (ug/L)	MS CONCENTRATION (ug/L)	MS % REC #	QC. LIMITS REC.
1,4-Dichlorobenzene	880	497	497	0*	10-100
2-Methylphenol	880	586	586	0*	10-100
4-Methylphenol	880	584	584	0*	10-100
Hexachloroethane	880	618	618	0*	10-100
Nitrobenzene	880	442	442	0*	10-100
Hexachlorobutadiene	500	345	345	0*	10-100
2,4,6-Trichlorophenol	880	1040	1040	0*	10-100
2,4,5-Trichlorophenol	880	1100	1100	0*	10-100
2,4-Dinitrotoluene	150	0.000	0.000	0*	10-100
Hexachlorobenzene	150	136	136	0*	10-100
Pentachlorophenol	880	8540	8540	0*	10-100
Pyridine	880	0.000	0.000	0*	10-100
Total Cresols	1760	1170	1170	0*	10-100

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

COMMENTS: _____

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

269

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 #	S7 #	S8 #	TOT OUT
01	KX1-662	80	86	70	60	93	81	94		0
02	KP367-1	54	65	48	51	87	75	78		0
03	KP367-4	66	78	59	56	97	76	82		0
04	KP367-1MS	46	67	50	47	86	68	81		0
05	KP367-1MSD	91	108	84	68	108	92	97		0
06	KX1-662MS	73	82	71	57	94	82	84		0
07										
08										
09										
10										
11										
12										
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22										
23										
24										
25										
26										
27										
28										
29										
30										

QC LIMITS

S1 (2FP)	= 2-Fluorophenol	(25-121)
S2 (PHL)	= Phenol-d5	(24-113)
S3 (NBZ)	= Nitrobenzene-d5	(23-120)
S4 (FBP)	= 2-Fluorobiphenyl	(30-115)
S5 (TBP)	= 2,4,6-Tribromophenol	(19-122)
S6	= O-Terphenyl	(0-137)
S7	= p-terphenyl	(18-137)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

270

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 #	S7 #	S8 #	TOT OUT
01	KP367-7	46	38	50	60	115	113			0
02	KP367-8	17D	26	60	66	139D	117			0
03										
04										
05										
06										
07										
08										
09										
10										
11										
12										
13										
14										
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22										
23										
24										
25										
26										
27										
28										
29										
30										

QC LIMITS

S1 (2FP)	= 2-Fluorophenol	(21-100)
S2 (PHL)	= Phenol-d5	(10- 94)
S3 (NBZ)	= Nitrobenzene-d5	(35-114)
S4 (FBP)	= 2-Fluorobiphenyl	(43-116)
S5 (TBP)	= 2,4,6-Tribromophenol	(10-123)
S6	= p-terphenyl	(33-141)

Column to be used to flag recovery values

* Values outside of contract required QC limits

D Surrogate diluted out

8B
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

271

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Lab File ID (Standard): K2740201002 Date Analyzed: 11/27/0

Instrument ID: MSD4 Time Analyzed: 1233

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	955633	11.12	3249136	14.80	1992445	19.53
UPPER LIMIT	1911266	11.62	6498272	15.30	3984890	20.03
LOWER LIMIT	477816	10.62	1624568	14.30	996222	19.03
EPA SAMPLE NO.						
01 KX1-662	1309507	11.13	4445753	14.81	2891684	19.53
02 KP367-7	1162782	11.13	4341880	14.81	2872960	19.54
03 KP367-8	1442221	11.13	5159735	14.81	3288173	19.53
04 KP367-1	1810506	11.13	6983287*	14.79	4332555*	19.53
05 KP367-4	2191417*	11.11	7918806*	14.79	5011282*	19.53
06 KP367-1MS	2023919*	11.11	7250577*	14.79	4576900*	19.53
07 KP367-1MSD	1131332	11.12	4466160	14.80	2771065	19.53
08 KX1-662MS	750804	11.12	2808075	14.80	1717306	19.53
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

272

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD4

Lab File ID (Standard): K2740201002 Date Analyzed: 11/27/0

Instrument ID: MSD4 Time Analyzed: 1233

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	3585167	23.30	4138362	30.09	4285221	34.00
UPPER LIMIT	7170334	23.80	8276724	30.59	8570442	34.50
LOWER LIMIT	1792584	22.80	2069181	29.59	2142610	33.50
EPA SAMPLE NO.						
01 KX1-662	5486774	23.30	5920300	30.09	5994592	34.01
02 KP367-7	5204397	23.31	5655786	30.09		
03 KP367-8	6210485	23.30	6529131	30.09		
04 KP367-1	7180154*	23.31	8000980	30.09	7782680	34.01
05 KP367-4	8397390*	23.30	8578721*	30.09	8506072	34.00
06 KP367-1MS	7525941*	23.31	7291526	30.09	7716287	34.00
07 KP367-1MSD	4882131	23.31	5122657	30.08	5431921	34.00
08 KX1-662MS	3016621	23.30	3638989	30.08	3910222	33.98
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

SEMICVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

273

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Lab File ID: K270101001 DFTPP Injection Date: 11/27/0

Instrument ID: MSD3 DFTPP Injection Time: 1137

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	33.1
68	Less than 2.0% of mass 69	0.0 (0.0)1
69	1.0 - 100.0% of mass 198	44.8
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	45.9
197	Less than 1.0% of mass 198	0.1
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.6
275	10.0 - 30.0% of mass 198	22.5
365	1.0 - 100.0% of mass 198	2.2
441	Present, but less than mass 443	11.5
442	40.0 - 100.0% of mass 198	80.5
443	17.0 - 23.0% of mass 442	14.0 (17.4)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 CCAL	CCAL	K270201002	11/27/0	1156
02 KP367-6	OK0P367006	K270401004	11/27/0	1333
03 KP367-6	OK0P367006	K270601006	11/27/0	1510
04				
05				
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7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

274

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Instrument ID: MSD3 Calibration Date: 11/27/0 Time: 1156

Lab File ID: K270201002 Init. Calib. Date(s): 08/19/98 08/19/98

Init. Calib. Times: 0823 1156

COMPOUND	RRF	RRF100	MIN RRF	%D	%D
Aniline	1.499	1.575	0.050	-5.1	20.0
Phenol	1.675	1.669	0.050	0.4	20.0
Bis(2-chloroethyl)ether	1.296	1.208	0.050	6.8	20.0
2-Chlorophenol	1.146	1.324	0.050	-15.5	20.0
1,3-Dichlorobenzene	1.439	1.406	0.050	2.3	20.0
1,4-Dichlorobenzene	1.472	1.586	0.050	-7.7	20.0
N-Nitrosodimethylamine	0.832	0.815	0.050	2.0	20.0
Benzyl Alcohol	0.684	0.759	0.050	-11.0	20.0
1,2-Dichlorobenzene	1.372	1.359	0.050	0.9	20.0
2-Methylphenol	1.148	0.927	0.050	19.2	20.0
bis(2-Chloroisopropyl)ether	1.338	1.130	0.050	15.5	20.0
4-Methylphenol	1.278	1.028	0.050	19.6	20.0
Hexachloroethane	0.513	0.448	0.050	12.7	20.0
Nitrobenzene	0.179	0.207	0.050	-15.6	20.0
Isophorone	0.548	0.649	0.050	-18.4	20.0
2-Nitrophenol	0.184	0.213	0.050	-15.8	20.0
2,4-Dimethylphenol	0.272	0.316	0.050	-16.2	20.0
Bis(2-chloroethoxy)methane	0.363	0.420	0.050	-15.7	20.0
Benzoic Acid	0.190	0.180	0.050	5.3	20.0
2,4-Dichlorophenol	0.307	0.263	0.050	14.3	20.0
1,2,4-Trichlorobenzene	0.360	0.373	0.050	-3.6	20.0
Naphthalene	1.006	0.995	0.050	1.1	20.0
4-Chloroaniline	0.414	0.450	0.050	-8.7	20.0
Hexachlorobutadiene	0.166	0.188	0.050	-13.2	20.0
4-Chloro-3-Methylphenol	0.084	0.090	0.050	-7.1	20.0
2-Methylnaphthalene	0.559	0.613	0.050	-9.7	20.0
Hexachlorocyclopentadiene	0.344	0.365	0.050	-6.1	20.0
2,4,6-Trichlorophenol	0.376	0.419	0.050	-11.4	20.0
2,4,5-Trichlorophenol	0.380	0.426	0.050	-12.1	20.0
2-Chloronaphthalene	1.120	1.270	0.050	-13.4	20.0
2-Nitroaniline	0.305	0.357	0.050	-17.0	20.0
Acenaphthylene	1.808	1.902	0.050	-5.2	20.0
2,6-Dinitrotoluene	0.240	0.299	0.050	-24.6	20.0
3-Nitroaniline	0.284	0.303	0.050	-6.7	20.0
Acenaphthene	0.577	0.534	0.050	7.4	20.0
2,4-Dinitrophenol	0.143	0.171	0.050	-19.6	20.0
Dibenzofuran	1.570	1.745	0.050	-11.1	20.0

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

275

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Instrument ID: MSD3 Calibration Date: 11/27/0 Time: 1156

Lab File ID: K270201002 Init. Calib. Date(s): 08/19/98 08/19/98

Init. Calib. Times: 0823 1156

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
4-Nitrophenol	0.159	0.166	0.050	-4.4	20.0
2,4-Dinitrotoluene	0.348	0.359	0.050	-3.2	20.0
Fluorene	1.296	1.250	0.050	3.5	20.0
Dimethylphthalate	1.384	1.512	0.050	-9.2	20.0
Diethylphthalate	1.280	1.286	0.050	-0.5	20.0
4-Chlorophenyl-phenylether	0.719	0.697	0.050	3.0	20.0
4-Nitroaniline	0.198	0.227	0.050	-14.6	20.0
4,6-Dinitro-2-methylphenol	0.148	0.174	0.050	-17.6	20.0
N-Nitrosodiphenylamine(1)	0.525	0.629	0.050	-19.8	20.0
1,2-Diphenylhydrazine	0.713	0.821	0.050	-15.1	20.0
4-Bromophenyl-phenylether	0.247	0.288	0.050	-16.6	20.0
Hexachlorobenzene	0.285	0.282	0.050	1.0	20.0
Pentachlorophenol	0.164	0.189	0.050	-15.2	20.0
Phenanthrone	1.162	1.288	0.050	-10.8	20.0
Anthracene	1.139	1.232	0.050	-8.2	20.0
Di-n-Butylphthalate	1.124	1.335	0.050	-18.8	20.0
Fluoranthene	1.206	1.390	0.050	-15.2	20.0
Benzidine	0.213	0.178	0.050	16.4	20.0
Pyrene	1.248	1.321	0.050	-5.8	20.0
Butylbenzylphthalate	0.576	0.671	0.050	-16.5	20.0
Benzo(a)Anthracene	1.215	1.283	0.050	-5.6	20.0
3,3'-Dichlorobenzidine	0.218	0.242	0.050	-11.0	20.0
Chrysene	1.269	1.307	0.050	-3.0	20.0
bis(2-ethylhexyl)Phthalate	0.813	0.900	0.050	-10.7	20.0
Di-n-octylphthalate	1.670	1.929	0.050	-15.5	20.0
Benzo(b)fluoranthene	1.520	1.635	0.050	-7.6	20.0
Benzo(k)fluoranthene	2.055	1.770	0.050	13.9	20.0
Benzo(a)pyrene	1.438	1.420	0.050	1.2	20.0
Indeno(1,2,3-cd)pyrene	0.965	0.780	0.050	19.2	20.0
Dibenzo(a,h)anthracene	1.011	1.058	0.050	-4.6	20.0
Benzo(g,h,i)perylene	1.093	0.927	0.050	15.2	20.0
Carbazole	1.086	1.039	0.050	4.3	20.0
Pyridine	1.038	1.072	0.050	-3.3	20.0
N-Nitrosodi-n-propylamine	0.864	0.741	0.050	14.2	20.0
2-Fluorophenol	1.088	1.118	0.050	-2.8	20.0

(1) Cannot be separated from Diphenylamine

All other compounds must meet a minimum RRF of 0.010.

7C
SEMIVOLATILE CONTINUING CALIBRATION CHECK

276

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Instrument ID: MSD3 Calibration Date: 11/27/0 Time: 1156

Lab File ID: K270201002 Init. Calib. Date(s): 08/19/98 08/19/98

Init. Calib. Times: 0823 1156

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
Phenol-d5	1.398	1.673	0.050	-19.7	20.0
Nitrobenzene-d5	0.144	0.173	0.050	-20.1	20.0
2-Fluorobiphenyl	1.183	1.127	0.050	4.7	20.0
2,4,6-Tribromophenol	0.140	0.155	0.050	-10.7	20.0
O-Terphenyl	0.648	0.642	0.050	0.9	20.0
p-Terphenyl	1.002	0.959	0.050	4.3	20.0

All other compounds must meet a minimum RRF of 0.010.

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

277

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Level: (low/med) LOW

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 #	S7 #	S8 #	TOT OUT
01	KP367-6	OD	OD	OD	OD	OD	OD	OD	OD	0
02	KP367-6	OD	OD	OD	OD	OD	OD	OD	OD	0
03										
04										
05										
06										
07										
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30										

QC LIMITS

S1 (2FP)	= 2-Fluorophenol	(26-121)
S2 (PHL)	= Phenol-d5	(24-113)
S3 (NBZ)	= Nitrobenzene-d5	(23-120)
S4 (FBP)	= 2-Fluorobiphenyl	(30-116)
S5 (TBP)	= 2,4,6-Tribromophenol	(10-122)
S6	= O-Terphenyl	(18-137)
S7	= p-Terphenyl	(18-137)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

8B
SEMOVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

278

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Lab File ID (Standard): K270201002 Date Analyzed: 11/27/0

Instrument ID: MSD3 Time Analyzed: 1156

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	359500	10.33	983906	13.96	569877	18.97
UPPER LIMIT	719000	10.83	1967812	14.46	1139754	19.47
LOWER LIMIT	179750	9.83	491953	13.46	284938	18.47
EPA SAMPLE NO.						
01 KP367-6	304895	10.33	992427	13.98	591021	18.97
02 KP367-6	221876	10.32	761837	13.97	436993	18.98
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19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

279

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K27MSD3

Lab File ID (Standard): K270201002 Date Analyzed: 11/27/0

Instrument ID: MSD3 Time Analyzed: 1156

	IS4 (PHN) AREA #	RT #	IS5 (CRY) AREA #	RT #	IS6 (PRY) AREA #	RT #
12 HOUR STD	799248	23.08	773958	30.55	438385	34.45
UPPER LIMIT	1598496	23.58	1547916	31.05	876770	34.95
LOWER LIMIT	399624	22.58	386979	30.05	219192	33.95
EPA SAMPLE NO.						
01 KP367-6	684434	23.08	499550	30.55	259043	34.46
02 KP367-6	690778	23.09	627606	30.55	523340	34.45
03						
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19						
20						
21						
22						

IS4 (PHN) = Phenanthrene-d10

IS5 (CRY) = Chrysene-d12

IS6 (PRY) = Perylene-d12

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

5B
SEMOVOLATILE ORGANIC INSTRUMENT PERFORMANCE CHECK
DECAFLUOROTRIPHENYLPHOSPHINE (DFTPP)

230

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K21MSD3

Lab File ID: K211501015 DFTPP Injection Date: 11/21/0

Instrument ID: MSD3 DFTPP Injection Time: 2330

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
51	30.0 - 60.0% of mass 198	35.1
68	Less than 2.0% of mass 69	0.7 (1.3)1
69	1.0 - 100.0% of mass 198	48.2
70	Less than 2.0% of mass 69	0.2 (0.4)1
127	40.0 - 60.0% of mass 198	47.7
197	Less than 1.0% of mass 198	0.0
198	Base Peak, 100% relative abundance	100.0
199	5.0 to 9.0% of mass 198	6.9
275	10.0 - 30.0% of mass 198	24.6
365	1.0 - 100.0% of mass 198	2.2
441	Present, but less than mass 443	12.4
442	40.0 - 100.0% of mass 198	83.3
443	17.0 - 23.0% of mass 442	14.9 (17.8)2

1-Value is % mass 69

2-Value is % mass 442

THIS CHECK APPLIES TO THE FOLLOWING SAMPLES, MS, MSD, BLANKS, AND STANDARDS:

EPA SAMPLE NO.	LAB SAMPLE ID	LAB FILE ID	DATE ANALYZED	TIME ANALYZED
01 CCAL	CCAL	K211601016	11/21/0	2353
02 KX1-643	OK0X001643	K211701017	11/22/0	0041
03				
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7B
SEMIVOLATILE CONTINUING CALIBRATION CHECK

281

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K21MSD3

Instrument ID: MSD3 Calibration Date: 11/21/0 Time: 2353

Lab File ID: K211601016 Init. Calib. Date(s): 12/12/95 11/17/0

Init. Calib. Times: 1914 2328

COMPOUND	RRF	RRF100	MIN RRF	%D	MAX %D
1,4-Dichlorobenzene	1.472	1.520	0.050	-3.3	20.0
2-Methylphenol	1.148	1.177	0.050	-2.5	20.0
4-Methylphenol	1.278	1.272	0.050	0.5	20.0
Hexachloroethane	0.513	0.546	0.050	-6.4	20.0
Nitrobenzene	0.179	0.212	0.050	-18.4	20.0
Hexachlorobutadiene	0.166	0.197	0.050	-18.7	20.0
2,4,6-Trichlorophenol	0.376	0.412	0.050	-9.6	20.0
2,4,5-Trichlorophenol	0.380	0.435	0.050	-14.5	20.0
2,4-Dinitrotoluene	0.348	0.342	0.050	1.7	20.0
Hexachlorobenzene	0.285	0.296	0.050	-3.8	20.0
Pentachlorophenol	0.164	0.166	0.050	-1.2	20.0
Pyridine	1.038	1.207	0.050	-16.3	20.0
Total Cresols (SUM)	200.0	202.0	0.050	-1.0	20.0
2-Fluorophenol	1.088	1.231	0.050	-13.1	20.0
Phenol-d5	1.398	1.634	0.050	-16.9	20.0
Nitrobenzene-d5	0.144	0.169	0.050	-17.4	20.0
2-Fluorobiphenyl	1.183	1.094	0.050	7.5	20.0
2,4,6-Tribromophenol	0.140	0.158	0.050	-12.8	20.0
O-Terphenyl	0.648	0.631	0.050	2.6	20.0

All other compounds must meet a minimum RRF of 0.010.

01/26/01 14:56

FORM IV

CTEES: Charleston Batch Log

Batch Number: 32791 Type: X On: 11/21/00 By: dam Prep Method: XOX-3541BNA Instrument:

282

C:\Program Files

Posted and Certified On: 11/27/00 By: dam Signed: _____

Lab Number	Type Notes	PG Group	Date	Time	By	Dil Fact	DT
TA0-K0-P367-001	F	XOA-S-8270-001	11/21/00	12:00 GTR		1.00	
		S: 30.4000 g	E:	1.1000 ml	P:		
TA0-K0-P367-004	F	XOA-S-8270-001				1.00	
		S: 30.0000 g	E:	1.1000 ml	P:		
TA0-K0-P367-009	MS	XOA-S-8270-001-MS				1.00	
		S: 30.9000 g	E:	1.0000 ml	P:		
TA0-K0-P367-010	MSD	XOA-S-8270-001-MSD				1.00	
		S: 30.4000 g	E:	1.2500 ml	P:		
TA0-K0-X001-662	MB	XOA-S-8270-001-MB				0.00	
		S: 30.5000 g	E:	1.0000 ml	P:		
TA0-K0-X001-663	LCS	XOA-S-8270-001-LCS				0.00	
		S: 30.1000 g	E:	1.0000 ml	P:		
TA0-K0-X001-664	BSD	XOA-S-8270-001-BSD				0.00	
		S: 30.3000 g	E:	1.3000 ml	P:		

Received prepared samples for analysis Signed: _____

Data File: K211701017.d
 Report Date: 08-Jan-2001 14:27

Page 1

CT&E Environmental Services Inc

SEMIVOLATILE REPORT BNA

Data file : /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K21msd3.b/K211701017.d
 Lab Smp Id: 0K0X001643 Client Smp ID: KX1-643
 Inj Date : 22-NOV-2000 00:41
 Operator : jer Inst ID: msd3.i
 Smp Info : TCLP BLANK K0-X001-643, K20, 200ml=>1ml
 Misc Info :
 Comment :
 Method : /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K21msd3.b/8270jerT.m
 Meth Date : 08-Jan-2001 14:09 bly Quant Type: ISTD
 Cal Date : 17-NOV-2000 23:28 Cal File: K170901009.d
 Als bottle: 17 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP RTE Compound Sublist: tclp.sub
 Target Version: 3.40 Sample Matrix: WATER
 Processing Host: ctegc1

Concentration Formula: Amt * DF * Vt/Vo

Name	Value	Description
DF	1.000	Dilution Factor
Vt	1.000	Volume of final extract (mL)
Vo	0.200	Volume of sample extracted (L)

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	(REL RT)	MASS	RESPONSE (NG)	(ug/L)	TARGET RANGE	RATIO
**	**	**	**	**	**	**	**
* 35 Naphthalene-d8					CAS #: 1146-65-2		
13.934	13.937	(1.000)	136	943339	40.0000	80.00- 120.00	100.00
13.934	13.937	(1.000)	68	46088		0.00- 24.33	4.89
-----	-----	-----	-----	-----	-----	-----	-----
* 66 Acenaphthene-d10					CAS #: 15067-26-2		
18.942	18.948	(1.000)	164	630004	40.0000	80.00- 120.00	100.00
18.942	18.948	(1.000)	162	587447		71.91- 111.91	93.24
18.942	18.948	(1.000)	160	261095		21.21- 61.21	41.44
-----	-----	-----	-----	-----	-----	-----	-----
* 98 Phenanthrene-d10					CAS #: 1517-22-2		
23.035	23.043	(1.000)	188	1045078	40.0000	80.00- 120.00	100.00
23.035	23.043	(1.000)	94	87029		0.00- 27.26	8.33
23.035	23.043	(1.000)	80	104119		0.00- 30.19	9.96
-----	-----	-----	-----	-----	-----	-----	-----
* 1 1,4-Dichlorobenzene-d4					CAS #: 3855-82-1		
10.290	10.291	(1.000)	152	271617	40.0000	80.00- 120.00	100.00

Data File: K211701017.d
 Report Date: 08-Jan-2001 14:27

CONCENTRATIONS
 ON-COL FINAL

RT	EXP RT (REL RT)	MASS	RESPONSE (NG)	(ug/L)	TARGET RANGE	RATIO
----	-----------------	------	----------------	---------	--------------	-------

* 1 1,4-Dichlorobenzene-d4 (continued)

10.290	10.291 (1.000)	150	431239		147.63- 187.63	158.77
10.290	10.291 (1.000)	115	158492		33.38- 73.38	58.35

\$ 9 2-Fluorophenol CAS #: 367-12-4

6.935	6.903 (0.674)	112	295680 40.0355	200.17	80.00- 120.00	100.00
6.935	6.903 (0.674)	64	148236		45.26- 85.26	50.13

\$ 20 Phenol-d5 CAS #: 4165-62-2

9.889	9.800 (0.961)	99	326423 34.3826	171.91	80.00- 120.00	100.00
9.873	9.800 (0.959)	71	112047		14.22- 54.22	34.33

\$ 106 2,4,6-Tribromophenol CAS #: 118-79-6

21.221	21.213 (0.921)	330	269610 73.7512	368.75	80.00- 120.00	100.00
21.221	21.213 (0.921)	141	72657		7.70- 47.70	26.95

\$ 36 Nitrobenzene-d5 CAS #: 4165-60-0

12.040	12.042 (0.864)	128	326302 95.9325	479.66	80.00- 120.00	100.00
12.040	12.042 (0.864)	82	645347		185.84- 225.84	197.78
12.024	12.042 (0.863)	54	314514		81.98- 121.98	96.39

\$ 73 2-Fluorobiphenyl CAS #: 321-60-8

17.128	17.134 (0.904)	172	1412530 75.8263	379.13	80.00- 120.00	100.00
17.128	17.134 (0.904)	171	503480		15.98- 55.98	35.64

\$ 126 O-Terphenyl CAS #:

24.367	24.450 (1.058)	230	1756083 103.676	518.37	80.00- 120.00	100.00
24.367	24.450 (1.058)	229	1063595		39.30- 79.30	60.57
24.367	24.450 (1.058)	231	295154		0.00- 37.13	16.81

CT&E Environmental Services Inc

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: msd3.i
Lab File ID: K211701017.d
Lab Smp Id: OK0X001643
Analysis Type: SV
Quant Type: ISTD
Operator: jer
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K21msd3.b/8270jerT.m
Misc Info:

Calibration Date: 21-NOV-2000
Calibration Time: 23:53
Client Smp ID: KX1-643
Level: LOW
Sample Type: WATER

COMPOUND	STANDARD	AREA LOWER	LIMIT UPPER	SAMPLE	%DIFF
35 Naphthalene-d8	976238	488119	1952476	943339	-3.37
66 Acenaphthene-d10	632157	316078	1264314	630004	-0.34
98 Phenanthrene-d10	965428	482714	1930856	1045078	8.25
1 1,4-Dichlorobenze	292069	146034	584138	271617	-7.00

COMPOUND	STANDARD	RT LOWER	LIMIT UPPER	SAMPLE	%DIFF
35 Naphthalene-d8	13.92	13.42	14.42	13.93	0.07
66 Acenaphthene-d10	18.93	18.43	19.43	18.94	0.04
98 Phenanthrene-d10	23.03	22.53	23.53	23.03	0.01
1 1,4-Dichlorobenze	10.29	9.79	10.79	10.29	-0.02

AREA UPPER LIMIT = +100% of internal standard area.

AREA LOWER LIMIT = - 50% of internal standard area.

RT UPPER LIMIT = + 0.50 minutes of internal standard RT.

RT LOWER LIMIT = - 0.50 minutes of internal standard RT.

CT&E Environmental Services Inc

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: OK0X001643
Level: LOW
Data Type: MS DATA
SpikeList File:
Sublist File: tcip.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8270C/K21msd3.b/8270jerT.m
Misc Info:

Client SDG: K21msd3
Fraction: SV
Client Smp ID: KX1-643
Operator: jer
SampleType: BLANK
Quant Type: ISTD

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 9 2-Fluorophenol	500.00	200.17	40.04	21-100
\$ 20 Phenol-d5	500.00	171.91	34.38	10-94
\$ 106 2,4,6-Tribromophen	500.00	368.75	73.75	10-123
\$ 36 Nitrobenzene-d5	500.00	479.66	95.93	35-114
\$ 73 2-Fluorobiphenyl	500.00	379.13	75.83	43-116
\$ 126 O-Terphenyl	500.00	518.37	103.68	33-141

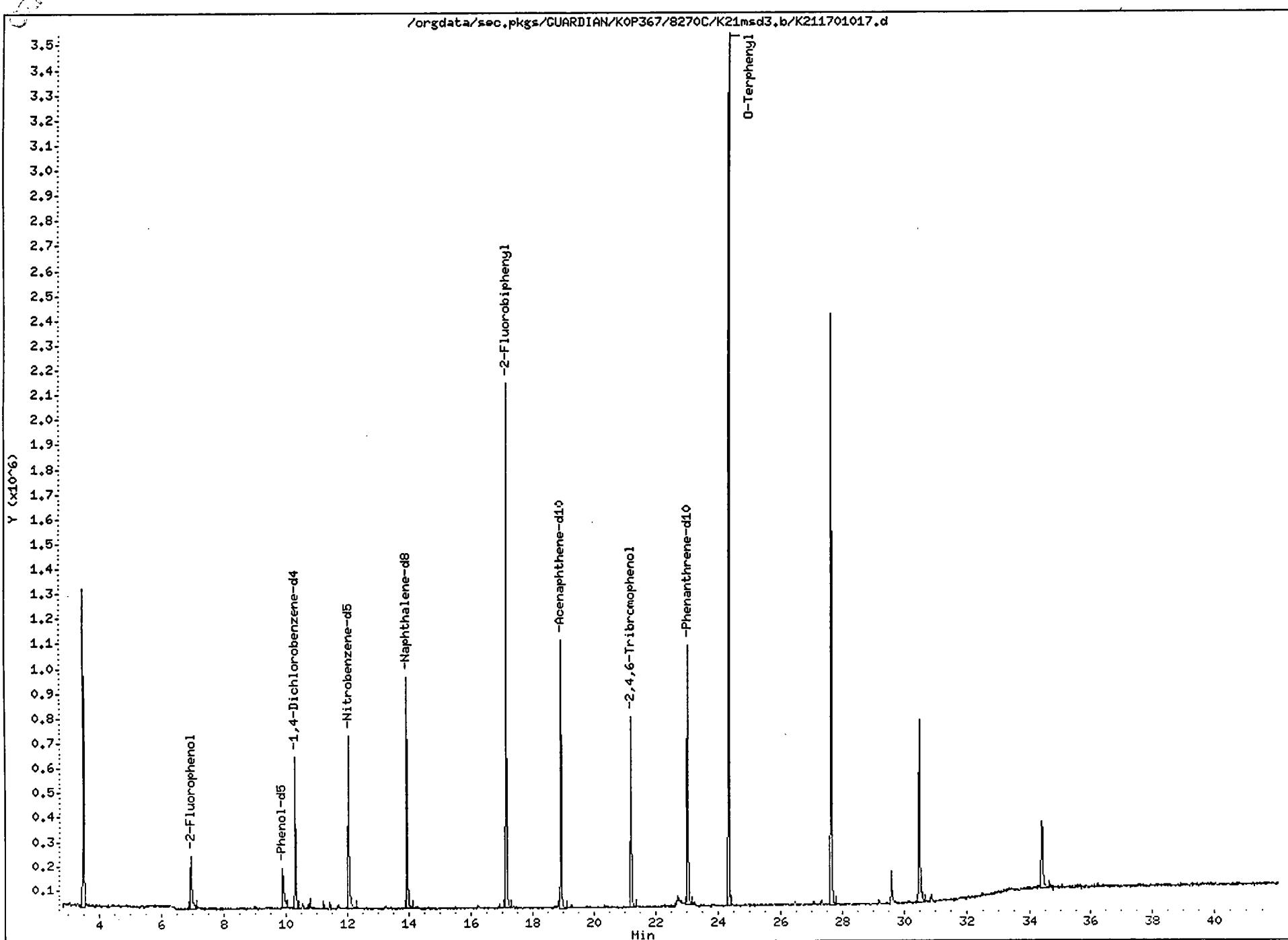
CT&E Environmental Services Inc

TARGET COMPOUNDS

Client Name:
Lab Smp Id: OKOX001643
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: SV
Data Type: MS DATA
Misc Info:

Client SDG: K21msd3
Client Smp ID: KX1-643
Sample Point:
Date Received:
Quant Type: ISTD
Level: LOW
Operator: jer

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
367-12-4-----	2-Fluorophenol _____	200.17	
4165-62-2-----	Phenol-d5 _____	171.91	
118-79-6-----	2,4,6-Tribromophenol _____	368.75	
4165-60-0-----	Nitrobenzene-d5 _____	479.66	
321-60-8-----	2-Fluorobiphenyl _____	379.13	
-----O-Terphenyl	_____	518.37	



2C
WATER SEMIVOLATILE SURROGATE RECOVERY

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K21MSD3

	EPA SAMPLE NO.	S1 (2FP) #	S2 (PHL) #	S3 (NBZ) #	S4 (FBP) #	S5 (TBP) #	S6 #	S7 #	S8 #	TOT OUT
01	KX1-643	40	34	96	76	74	104			0
02										
03										
04										
05										
06										
07										
08										
09										
10										
11										
12										
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23										
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25										
26										
27										
28										
29										
30										

QC LIMITS

S1 (2FP)	= 2-Fluorophenol	(21-100)
S2 (PHL)	= Phenol-d5	(10- 94)
S3 (NBZ)	= Nitrobenzene-d5	(35-114)
S4 (FBP)	= 2-Fluorobiphenyl	(43-116)
S5 (TBP)	= 2,4,6-Tribromophenol	(10-123)
S6	= O-Terphenyl	(33-141)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

8B
SEMOVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

290

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K21MSD3

Lab File ID (Standard): K211601016 Date Analyzed: 11/21/0

Instrument ID: MSD3 Time Analyzed: 2353

	IS1 (DCB) AREA #	RT #	IS2 (NPT) AREA #	RT #	IS3 (ANT) AREA #	RT #
12 HOUR STD	292069	10.29	976238	13.92	632157	18.93
UPPER LIMIT	584138	10.79	1952476	14.42	1264314	19.43
LOWER LIMIT	146034	9.79	488119	13.42	316078	18.43
EPA SAMPLE NO.						
01 KX1-643	271617	10.29	943339	13.93	630004	18.94
02						
03						
04						
05						
06						
07						
08						
09						
10						
11						
12						
13						
14						
15						
16						
17						
18						
19						
20						
21						
22						

IS1 (DCB) = 1,4-Dichlorobenzene-d4

IS2 (NPT) = Naphthalene-d8

IS3 (ANT) = Acenaphthene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.

* Values outside of QC limits.

8C
SEMIVOLATILE INTERNAL STANDARD AREA AND RT SUMMARY

291

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: K21MSD3

Lab File ID (Standard): K211601016 Date Analyzed: 11/21/0

Instrument ID: MSD3 Time Analyzed: 2353

	IS4 (PHN) AREA #	RT #	AREA #	RT #	AREA #	RT #
=====	=====	=====	=====	=====	=====	=====
12 HOUR STD	965428	23.03	_____	_____	_____	_____
UPPER LIMIT	1930856	23.53	_____	_____	_____	_____
LOWER LIMIT	482714	22.53	_____	_____	_____	_____
=====	=====	=====	=====	=====	=====	=====
EPA SAMPLE NO.						
=====	=====	=====	=====	=====	=====	=====
01 KX1-643	1045078	23.03	_____	_____	_____	_____
02			_____	_____	_____	_____
03			_____	_____	_____	_____
04			_____	_____	_____	_____
05			_____	_____	_____	_____
06			_____	_____	_____	_____
07			_____	_____	_____	_____
08			_____	_____	_____	_____
09			_____	_____	_____	_____
10			_____	_____	_____	_____
11			_____	_____	_____	_____
12			_____	_____	_____	_____
13			_____	_____	_____	_____
14			_____	_____	_____	_____
15			_____	_____	_____	_____
16			_____	_____	_____	_____
17			_____	_____	_____	_____
18			_____	_____	_____	_____
19			_____	_____	_____	_____
20			_____	_____	_____	_____
21			_____	_____	_____	_____
22			_____	_____	_____	_____

IS4 (PHN) = Phenanthrene-d10

AREA UPPER LIMIT = +100% of internal standard area

AREA LOWER LIMIT = - 50% of internal standard area

RT UPPER LIMIT = + 0.50 minutes of internal standard RT

RT LOWER LIMIT = - 0.50 minutes of internal standard RT

Column used to flag internal standard area values with an asterisk.
* Values outside of QC limits.

CT&E Environmental Services Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-NOV-2000 11:45
 End Cal Date : 14-NOV-2000 18:20
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.00
 Integrator : HP Genie
 Method file : \\NT_THRUPUT_1A\arc00\gc14.i\14K14-1.b\K14PCB14a.m
 Cal Date : 15-Nov-2000 12:40 jam
 Curve Type : Average

Calibration File Names:

Level 1: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K14-1.b\14K14018.d
 Level 2: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K14-1.b\14K14017.d
 Level 3: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K14-1.b\14K14016.d
 Level 4: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K14-1.b\14K14015.d
 Level 5: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K14-1.b\14K14014.d
 Level 6: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K14-1.b\14K14013.d

Compound	0.04000	0.08000	0.20000	0.80000	1.000	2.000	—	RRF	% RSD
1 Aroclor-1016(1)	6592025	6137163	5624900	5893409	5627955	4780180	5775939	10.521	
(2)	3030100	2701575	2396590	2538691	2519031	2509784	2615962	8.609	
(3)	2352675	2155613	1967525	2127408	2111180	2148269	2143778	5.758	
(4)	2437125	2257013	2100410	2240306	2191425	2306130	2255401	5.014	
(5)	2923800	2624613	2326130	2360726	2287298	2156919	2446581	11.424	
7 Aroclor-1254(1)	8809550	8378313	7980180	8887171	8400409	7702238	8359643	5.505	
(2)	6039225	5764175	5417495	6050928	5842076	5870439	5830723	3.977	
(3)	7126825	6874238	6570160	7198883	6864282	6242031	6812736	5.246	
(4)	6980475	6593738	6206725	6843086	6528369	5860116	6502085	6.355	
(5)	7115100	6634925	6210870	6539380	6422414	5931499	6475698	6.205	
8 Aroclor-1260(1)	10462525	10251338	9321085	9736471	9030758	8187578	9498292	8.836	
(2)	14970500	14562288	13591715	13763753	12525801	10992643	13401117	10.837	
(3)	10743650	10077325	9017575	9378324	8727571	8328703	9378858	9.546	
(4)	20241950	19383413	18227360	18929926	17066440	14429319	18046401	11.481	
(5)	11402700	10777000	10001025	10402745	9472814	8304491	10060129	10.765	
\$ 11 Tetrachloro-m-xylene	65518500	63985875	62278900	59090750	54230950	42591290	57949378	14.713	
\$ 12 Decachlorobiphenyl	93692500	89577000	73528700	81063863	69826300	59960660	77941504	16.248	

Data File: 14K14006.d
Report Date: 19-Dec-2000 16:10

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CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc14.i
Lab File ID: 14K14006.d
Analysis Type: WIPE
Lab Sample ID: 1254
Quant Type: ESTD

Injection Date: 14-NOV-2000 13:48
Init. Calibration Date(s): 11/01/0 11/14/0
Init. Calibration Times: 11:45 18:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/

COMPOUND	—	MIN	MAX		
	RRF	RF1	RRF	%D	%D
7 Aroclor-1254 (1)	8359643.458	7526790.000	0.010	10.0	15.0
(2)	5830722.917	5098843.750	0.010	12.6	15.0
(3)	6812736.333	6427662.500	0.010	5.7	15.0
(4)	6502084.708	6391518.750	0.010	1.7	15.0
(5)	6475697.917	6336562.500	0.010	2.1	15.0

Data File: 14K14065.d
 Report Date: 19-Dec-2000 16:30

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc14.i
 Lab File ID: 14K14065.d
 Analysis Type: SOIL
 Lab Sample ID: 1016/1260
 Quant Type: ESTD

Injection Date: 15-NOV-2000 07:15
 Init. Calibration Date(s): 11/01/0 11/14/0
 Init. Calibration Times: 11:45 18:20
 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/

COMPOUND	RRF	RF1	RRF	MIN	%D	MAX
1 Aroclor-1016(1)	5775938.542	6350236.250	0.010	-9.9	15.0	
(2)	2615961.792	2690750.000	0.010	-2.9	15.0	
(3)	2143778.083	2239522.500	0.010	-4.5	15.0	
(4)	2255401.458	2305440.000	0.010	-2.2	15.0	
(5)	2446580.875	2323116.250	0.010	5.0	15.0	
8 Aroclor-1260(1)	9498292.458	10431385.000	0.010	-9.8	15.0	
(2)	13401116.500	14366901.250	0.010	-7.2	15.0	
(3)	9378857.875	9461677.500	0.010	-0.9	15.0	
(4)	18046401.292	18897280.000	0.010	-4.7	15.0	
(5)	10060129.083	10194762.500	0.010	-1.3	15.0	

Data File: 14K14067.d
 Report Date: 19-Dec-2000 16:08

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CT&E Environmental Services Inc

PCB, Channel A

Data file : /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/14K14-1.b/14K14067.d
 Lab Smp Id: 0K0X001474 Client Smp ID: 0K0X001474
 Inj Date : 15-NOV-2000 07:48
 Operator : kpp Inst ID: gc14.i
 Smp Info : 0K0X001474 K14 OIL
 Misc Info :
 Comment :
 Method : /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/14K14-1.b/K14PCB14a.m
 Meth Date : 19-Dec-2000 15:41 bly Quant Type: ESTD
 Cal Date : 14-NOV-2000 18:20 Cal File: 14K14018.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 1.00000
 Integrator: HP Genie Compound Sublist: PCB-O-8082.sub
 Target Version: 3.40 Sample Matrix: OIL
 Processing Host: ctegcl

Concentration Formula: Amt * DF * (Vf/Vi)*1000

Name	Value	Description
DF	1.000	Dilution Factor
Vf	10.000	Final Volume (mL)
Vi	0.537	Initial Volume (g)

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 11 Tetrachloro-m-xylene					CAS #: 00877-09-8		
1.117	1.100	0.017	2998704	0.05175	964	80.00- 120.00	100.00 (M)

RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/Kg)	TARGET RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====
\$ 12 Decachlorobiphenyl					CAS #: 02051-24-3		
7.750	7.700	0.050	4076769	0.05231	974	80.00- 120.00	100.00 (M)

QC Flag Legend

M - Compound response manually integrated.

CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: 14K14-1
Sample Matrix: GAS Fraction: SV
Lab Smp Id: OK0X001474 Client Smp ID: OK0X001474
Level: MED Operator: kpp
Data Type: GC MULTI COMP SampleType: BLANK
SpikeList File: 1254soil_lcs.spk Quant Type: ESTD
Sublist File: PCB-O-8082.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/14K14-1.b/K14PCB14a.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 11 Tetrachloro-m-xyle	931	964	103.49	27-132
\$ 12 Decachlorobiphenyl	931	974	104.61	50-150

CT&E Environmental Services Inc

TARGET COMPOUNDS

Client Name:
Lab Smp Id: OK0X001474
Sample Location:
Sample Date:
Sample Matrix: OIL
Analysis Type: SV
Data Type: GC MULTI COMP
Misc Info:

Client SDG: 14K14-1
Client Smp ID: OK0X001474
Sample Point:
Date Received:
Quant Type: ESTD
Level: MED
Operator: kpp

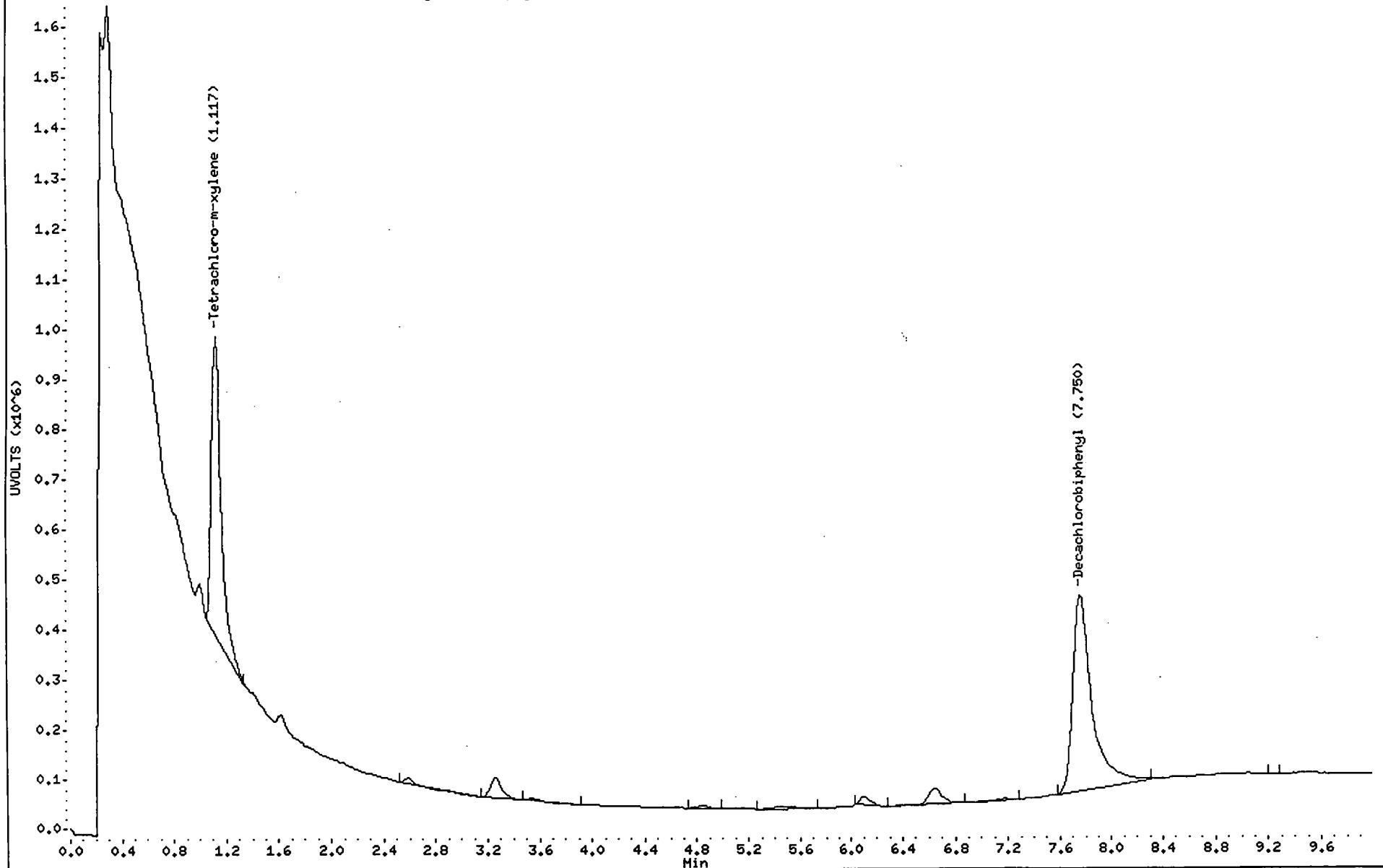
CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
00877-09-8	Tetrachloro-m-xylene		964	
02051-24-3	Decachlorobiphenyl		974	

Data File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8082/14K14-1.b/14K14067.d
Date : 15-NOV-2000 07:48
Client ID: OKOX001474
Sample Info: OKOX001474 K14 OIL
Volume Injected (uL): 0.5
Column phase: J&W DB1701

Instrument: gc14.i
Operator: kpp
Column diameter: 0.53

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/orgdata/sec.pkgs/GUARDIAN/KOP367/8082/14K14-1.b/14K14067.d/14K14067.CDF



CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: 14K14-1
Sample Matrix: GAS Fraction: SV
Lab Smp Id: OK0X001475 Client Smp ID: OK0X001475LCS
Level: MED Operator: kpp
Data Type: GC MULTI COMP SampleType: LCS
SpikeList File: 1254oil_lcs.spk Quant Type: ESTD
Sublist File: PCB-O-8082.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/14K14-1.b/K14PCB14a.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
7 Aroclor-1254	9320	11900	127.98	60-130

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 11 Tetrachloro-m-xyle	932	1130	121.11	27-132
\$ 12 Decachlorobiphenyl	932	880	94.48	50-150

2C
OIL SEMIVOLATILE SURROGATE RECOVERY

300

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 14K14-1

	EPA SAMPLE NO.	S1 (TCX) #	S2 (DCB) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	OKOX001474	103	105							0
02	OKOP367006	41	1325D							0
03	OKOX001475LC	121	94							0
04										
05										
06										
07										
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QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene	(27-132)
S2 (DCB) = Decachlorobiphenyl	(50-150) (advisory)

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D Surrogate diluted out

CT&E Environmental Services Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 01-NOV-2000 11:45
 End Cal Date : 16-NOV-2000 17:19
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.00
 Integrator : HP Genie
 Method file : \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\K16PCB14a.m
 Cal Date : 17-Nov-2000 08:33 kpp
 Curve Type : Average

Calibration File Names:

Level 1: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\14K16024.d
 Level 2: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\14K16023.d
 Level 3: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\14K16022.d
 Level 4: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\14K16021.d
 Level 5: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\14K16020.d
 Level 6: \\NT_THRUPUT_1A\chemnt1\gc14.i\14K16-1.b\14K16019.d

Compound	0.04000	0.08000	0.20000	0.80000	1.000	2.000	—	RRF	% RSD
1 Aroclor-1016 (1)	6592025	6137163	5624900	5893409	5627955	4780180	5775939	10.521	
(2)	3030100	2701575	2396590	2538691	2519031	2509784	2615962	8.609	
(3)	2352675	2155613	1967525	2127408	2111180	2148269	2143778	5.758	
(4)	2437125	2257013	2100410	2240306	2191425	2306130	2255401	5.014	
(5)	2923800	2624613	2326130	2360726	2287298	2156919	2446581	11.424	
7 Aroclor-1254 (1)	9209175	8697125	8684690	9487903	9126763	8763956	8994935	3.669	
(2)	6183825	5816200	5799770	6443969	6329760	6673601	6207854	5.617	
(3)	7689650	7276400	7117735	7781214	7510583	6961969	7389592	4.396	
(4)	7630925	7041388	6890115	7495329	7174710	6548661	7130188	5.574	
(5)	7761950	7035438	6794100	7158119	7097951	6652572	7083355	5.423	
8 Aroclor-1260 (1)	12623750	12019938	11428420	11916818	10973571	8853604	11302683	11.710	
(2)	17152950	16430825	16083590	15993995	14614536	11744667	15336761	12.680	
(3)	11305425	10628400	10033870	10773656	10160671	8755962	10276331	8.499	
(4)	21647375	20729738	20350240	20713273	18899286	15004317	19557371	12.287	
(5)	11884475	11173013	10878725	11108035	10255986	8462555	10627131	11.131	
\$ 11 Tetrachloro-m-xylene	77618500	73208875	72811450	65212038	60485770	47531945	66144763	16.635	
\$ 12 Decachlorobiphenyl	84530000	81977750	81451800	77992825	72845910	72195120	78498901	6.474	

Data File: 14K21004.d
 Report Date: 19-Dec-2000 16:34

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CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc14.i
 Lab File ID: 14K21004.d
 Analysis Type: OIL
 Lab Sample ID: 1016/1260
 Quant Type: ESTD

Injection Date: 21-NOV-2000 12:11
 Init. Calibration Date(s): 11/01/0 11/16/0
 Init. Calibration Times: 11:45 17:19
 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/

COMPOUND	RRF	RF1	RRF	MIN	%D	MAX
1 Aroclor-1016(1)	5775938.542	6474598.750	0.010	-12.1	15.0	
(2)	2615961.792	2753270.000	0.010	-5.2	15.0	
(3)	2143778.083	2298266.250	0.010	-7.2	15.0	
(4)	2255401.458	2358277.500	0.010	-4.6	15.0	
(5)	2446580.875	2499676.250	0.010	-2.2	15.0	
8 Aroclor-1260(1)	11302683.250	11236767.500	0.010	0.6	15.0	
(2)	15336760.500	14651235.000	0.010	4.5	15.0	
(3)	10276330.625	9795940.000	0.010	4.7	15.0	
(4)	19557371.333	19572958.750	0.010	-0.1	15.0	
(5)	10627131.417	10631885.000	0.010	0.0	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc14.i Injection Date: 21-NOV-2000 12:44
Lab File ID: 14K21006.d Init. Calibration Date(s): 11/01/0 11/16/0
Analysis Type: OIL Init. Calibration Times: 11:45 17:19
Lab Sample ID: 1254 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/
Quant Type: ESTD

COMPOUND	RRF	RF1	RRF	MIN	%D	MAX
7 Aroclor-1254(1)	8994935.250	9399653.750	0.010	-4.5	15.0	
(2)	6207854.125	6141635.000	0.010	1.1	15.0	
(3)	7389591.792	7528552.500	0.010	-1.9	15.0	
(4)	7130187.875	7337818.750	0.010	-2.9	15.0	
(5)	7083354.792	7142318.750	0.010	-0.8	15.0	

3D
SOIL SEMIVOLATILE MATRIX SPIKE/MATRIX SPIKE DUPLICATE RECOVERY

304

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 14K21-1

Matrix Spike - EPA Sample No.: 0K0P367001 Level: (low/med) HIGH

COMPOUND	SPIKE ADDED (ug/Kg)	SAMPLE CONCENTRATION (ug/Kg)	MS CONCENTRATION (ug/Kg)	MS % REC #	QC. LIMITS REC.
Aroclor-1254	167	0.000	159	95	50-130

COMPOUND	SPIKE ADDED (ug/Kg)	MSD CONCENTRATION (ug/Kg)	MSD % REC #	% RPD #	QC LIMITS RPD	REC.
Aroclor-1254	167	110	66	36	40	50-130

Column to be used to flag recovery and RPD values with an asterisk
 * Values outside of QC limits

RPD: 0 out of 1 outside limits

Spike Recovery: 0 out of 2 outside limits

COMMENTS: _____

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

305

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 14K21-1

Level: (low/med) HIGH

	EPA SAMPLE NO.	S1 (TCX) #	S2 (DCB) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	OK0P367001	79	103							0
02	OK0P367004	88	95							0
03	OK0P367001MS	100	119							0
04	OK0P367001MS	78	95							0
05										
06										
07										
08										
09										
10										
11										
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QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (27-132)
 S2 (DCB) = Decachlorobiphenyl (50-150) (advisory)

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D Surrogate diluted out

CT&E Environmental Services

INITIAL CALIBRATION DATA

Start Cal Date : 29-SEP-2000 19:52
 End Cal Date : 30-OCT-2000 21:35
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 4.00
 Integrator : HP Genie
 Method file : \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\J30PCB15a.m
 Cal Date : 31-Oct-2000 09:09 jam
 Curve Type : Average

Calibration File Names:

Level 1: \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\15J30031.d
 Level 2: \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\15J30030.d
 Level 3: \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\15J30029.d
 Level 4: \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\15J30028.d
 Level 5: \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\15J30027.d
 Level 6: \\NT_THRUPUT_2A\chemnt2\gc15.i\15J30-1.b\15J30026.d

Compound	0.04000	0.08000	0.20000	0.80000	1.000	2.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
1 Aroclor-1016(1)	1181125	1054325	955270	955765	949988	951353	1007971	9.328
(2)	492350	442888	399300	392390	387674	376973	415262	10.613
(3)	422425	356163	325620	333669	328635	319064	347596	11.159
(4)	414275	337400	307300	350194	346344	334785	348383	10.223
(5)	420400	403725	365265	344881	330016	313157	362907	11.599
6 Aroclor-1254(1)	1772600	1613663	1499255	1517514	1533686	1593492	1588368	6.331
(2)	1136825	1070538	1005510	993581	987971	988713	1030523	5.895
(3)	1362375	1275900	1182550	1164321	1174405	1220116	1229944	6.233
(4)	1367225	1259650	1150235	1124635	1126271	1163676	1198615	8.039
(5)	1433275	1291175	1159025	1088771	1091671	1075452	1189895	12.086
7 Aroclor-1260(1)	2430950	2333338	2093240	2301306	2145437	2275456	2263288	5.498
(2)	3332900	3083413	2790550	3229726	3023030	3147074	3101115	6.037
(3)	2077800	1926388	1725000	1831423	1700218	1775866	1839449	7.725
(4)	4046175	3708975	3334930	3759616	3527448	3717989	3682522	6.483
(5)	2216200	1998613	1803045	1920438	1784804	1823175	1924379	8.543
\$ 10 Tetrachloro-m-xylene	15226250	13654750	12344600	12406963	12577770	11902310	13018774	9.437
\$ 12 Decachlorobiphenyl	19503500	17722250	16887200	16733400	16863370	17160255	17478329	6.025

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc15.i Injection Date: 17-NOV-2000 12:30
Lab File ID: 15K17004.d Init. Calibration Date(s): 09/29/0 10/30/0
Analysis Type: wipe Init. Calibration Times: 19:52 21:35
Lab Sample ID: 1016/1260 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/
Quant Type: ESTD

COMPOUND		MIN	MAX		
	RRF	RF1	RRF	%D	%D
1 Aroclor-1016(1)	1007971.000	1004495.000	0.010	0.3	15.0
(2)	415262.333	412610.000	0.010	0.6	15.0
(3)	347595.792	351085.000	0.010	-1.0	15.0
(4)	348382.875	385587.500	0.010	-10.7	15.0
(5)	362907.292	357971.250	0.010	1.4	15.0
7 Aroclor-1260(1)	2263287.792	2212150.000	0.010	2.3	15.0
(2)	3101115.458	3026415.000	0.010	2.4	15.0
(3)	1839448.917	1745420.000	0.010	5.1	15.0
(4)	3682522.208	3506160.000	0.010	4.8	15.0
(5)	1924379.000	1790176.250	0.010	7.0	15.0

CT&E Environmental Services Inc
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc15.i
Lab File ID: 15K17006.d
Analysis Type: wipe
Lab Sample ID: 1254
Quant Type: ESTD

Injection Date: 17-NOV-2000 13:03
Init. Calibration Date(s): 09/29/0 10/30/0
Init. Calibration Times: 19:52 21:35
Method File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8082/

COMPOUND	RRF	RF1	MIN	MAX
			%D	%D
6 Aroclor-1254 (1)	1588368.125	1498255.000	0.010	5.7 15.0
(2)	1030522.958	969120.000	0.010	6.0 15.0
(3)	1229944.458	1118420.000	0.010	9.1 15.0
(4)	1198615.333	1102082.500	0.010	8.1 15.0
(5)	1189894.875	1067327.500	0.010	10.3 15.0

Data File: 15K17054B.d
 Report Date: 19-Dec-2000 16:09

CT&E Environmental Services Inc

PCB, Channel A

Data file : /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/15K17-1.b/15K17054B.d
 Lab Smp Id: OK0X001597 Client Smp ID: OK0X001597
 Inj Date : 18-NOV-2000 02:25
 Operator : jam Inst ID: gc15.i
 Smp Info : OK0X001597 K17 1/5
 Misc Info :
 Comment :
 Method : /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/15K17-1.b/J30PCB15a.m
 Meth Date : 19-Dec-2000 15:49 bly Quant Type: ESTD
 Cal Date : 30-OCT-2000 21:35 Cal File: 15J30031.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 5.00000
 Integrator: HP Genie Compound Sublist: PCB-S-8082.sub
 Target Version: 3.40 Sample Matrix: SOIL
 Processing Host: ctegc1

Concentration Formula: Amt * DF * (Vf/Vi)*(100/S)*1000

Name	Value	Description
DF	5.000	Dilution Factor
Vf	5.000	volume final ext. (mL)
Vi	30.000	Weight initial ext.(g)
S	100.000	% solids

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE	(ug/ml)	(ug/Kg)	TARGET	RANGE	RATIO
==	=====	=====	=====	=====	=====	=====	=====	=====
\$ 10 Tetrachloro-m-xylene					CAS #: 00877-09-8			
1.183 1.158 0.025	344193	0.02644	22.0	80.00-	120.00	100.00	(M)	

\$ 12 Decachlorobiphenyl	CAS #: 02051-24-3
8.100 8.067 0.033	589155 0.03371 28.1 80.00- 120.00 100.00 (M)

QC Flag Legend

M - Compound response manually integrated.

Data File: 15K17054B.d
Report Date: 19-Dec-2000 16:09

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CT&E Environmental Services Inc

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: 0K0X001597
Level: HIGH
Data Type: GC MULTI COMP
SpikeList File: 1254soil_lcs.spk
Sublist File: PCB-S-8082.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/15K17-1.b/J30PCB15a.m
Misc Info:

Client SDG: 15K17-1
Fraction: SV
Client Smp ID: 0K0X001597
Operator: jam
SampleType: BLANK
Quant Type: ESTD

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 10 Tetrachloro-m-xyle	33.3	22.0	66.10	27-132
\$ 12 Decachlorobiphenyl	33.3	28.1	84.27	50-150

Data File: 15K17054B.d
Report Date: 19-Dec-2000 16:09

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CT&E Environmental Services Inc

TARGET COMPOUNDS

Client Name:
Lab Smp Id: 0K0X001597
Sample Location:
Sample Date:
Sample Matrix: SOIL
Analysis Type: SV
Data Type: GC MULTI COMP
Misc Info:

Client SDG: 15K17-1
Client Smp ID: 0K0X001597
Sample Point:
Date Received:
Quant Type: ESTD
Level: HIGH
Operator: jam

CAS NO. COMPOUND CONCENTRATION UNITS:
(ug/L or ug/Kg) ug/Kg Q

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/Kg)	ug/Kg	Q
00877-09-8	Tetrachloro-m-xylene		22.0	
02051-24-3	Decachlorobiphenyl		28.1	

Data File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8082/15K17-1.b/15K17054B.d

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Date : 18-NOV-2000 02:25

Client ID: OKOX001597

Instrument: gc15.i

Sample Info: OKOX001597 K17 1/5

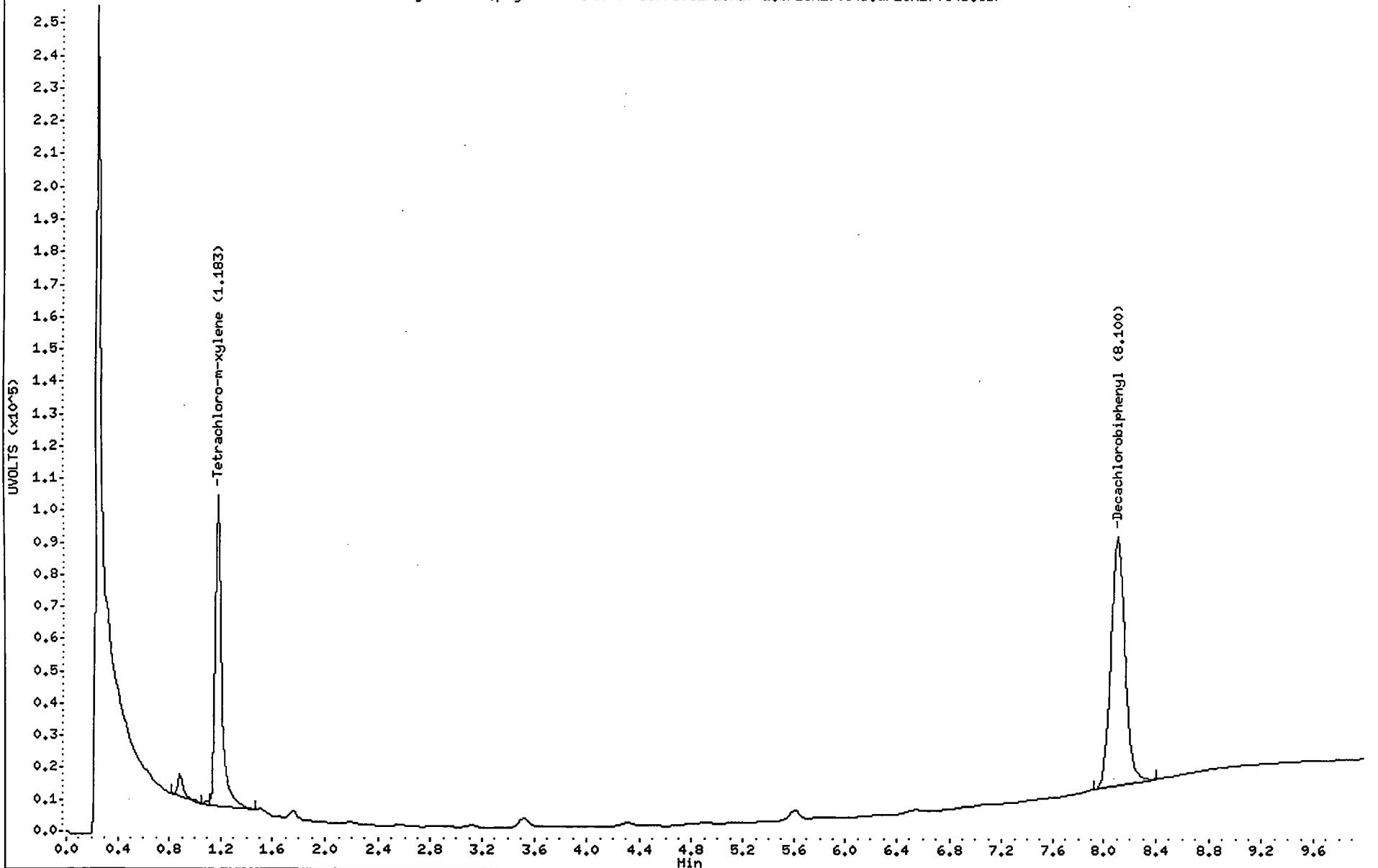
Volume Injected (uL): 30.0

Operator: jam

Column phase: J&W DB1701

Column diameter: 0.53

/orgdata/sec.pkgs/GUARDIAN/KOP367/8082/15K17-1.b/15K17054B.d/15K17054B.CDF



CT&E Environmental Services Inc

RECOVERY REPORT

Client Name:
Sample Matrix: SOLID
Lab Smp Id: OK0X001598
Level: HIGH
Data Type: GC MULTI COMP
SpikeList File: 1254soil_lcs.spk
Sublist File: PCB-S-8082.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8082/15K17-1.b/J30PCB15a.m
Misc Info:

Client SDG: 15K17-1
Fraction: SV
Client Smp ID: OK0X001598LCS
Operator: jam
SampleType: LCS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
6 Aroclor-1254	167	123	73.81	60-130

SURROGATE COMPOUND	CONC ADDED ug/Kg	CONC RECOVERED ug/Kg	% RECOVERED	LIMITS
\$ 10 Tetrachloro-m-xyle	33.3	20.0	59.93	27-132
\$ 12 Decachlorobiphenyl	33.3	21.0	62.85	50-150

2D
SOIL SEMIVOLATILE SURROGATE RECOVERY

314

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 15K17-1

Level: (low/med) HIGH

	EPA SAMPLE NO.	S1 (TCX) #	S2 (DCB) #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
	=====	=====	=====	=====	=====	=====	=====	=====	=====	====
01	OKOX001597	66	84							0
02	OKOX001598LC	60	63							0
03										
04										
05										
06										
07										
08										
09										
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30										

QC LIMITS

S1 (TCX) = Tetrachloro-m-xylene (27-132)
 S2 (DCB) = Decachlorobiphenyl (50-150) (advisory)

- # Column to be used to flag recovery values
- * Values outside of contract required QC limits
- D Surrogate diluted out

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

```
Start Cal Date : 05-OCT-1999 02:31
End Cal Date : 19-OCT-2000 13:09
Quant Method : ESTD
Origin : Disabled
Target Version : 3.40
Integrator : HP Genie
Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
Cal Date : 19-Oct-2000 15:56 tphilip
Curve Type : Average
```

Compound	3.000	4.000	5.000	10.000	15.000	20.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
	25.000	30.000	40.000					
	Level 7	Level 8	Level 9					
153 Hexachlorobenzene	247169	230713	232826	233318	231775	247800		
	241604	254979	249956				241127	3.815
154 alpha-BHC	259400	244937	252308	248882	245814	261120		
	256690	283409	280890				259272	5.460
155 gamma-BHC	220310	214142	206777	216692	215968	232911		
	215136	244208	243785				223326	6.088
156 beta-BHC	73351	80040	96921	83508	79600	84366		
	76812	75876	70465				80104	9.670
157 Heptachlor	249160	215645	228241	224346	224896	239680		
	228286	249145	250501				234433	5.522
158 delta-BHC	208940	202499	222657	211122	210266	242812		
	222770	228863	223370				219255	5.637
159 Aldrin	184432	188260	195305	192216	193243	223336		
	204833	209892	207059				199842	6.189
160 Hept.epoxide	168410	171044	173099	167780	169063	190314		
	171877	176522	169475				172954	4.100
161 g-Chlordane	191037	201005	188589	174961	173262	199955		
	178873	182924	175391				185111	5.736
162 a-Chlordane	148914	155388	157829	151206	149479	171530		
	154124	151477	147454				154156	4.739

Report Date : 19-Oct-2000 16:15

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CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphilip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	25.000	30.000	40.000					
	Level 7	Level 8	Level 9					
163 Endosulfan I	160104	155244	160305	161112	156613	165679		
	162897	167491	166670				161791	2.657
164 4,4'-DDE	147379	153068	155542	160286	155721	185551		
	169173	169806	165399				162436	7.068
165 Dieldrin	156609	159477	161963	167810	165546	175996		
	174253	182809	188893				170373	6.406
166 Endrin	100517	102543	103633	108660	102160	107647		
	107541	110944	113434				106342	4.115
167 4,4'-DDD	119580	121697	130335	130849	127706	132339		
	129624	132929	130584				128405	3.645
168 Endosulfan II	113829	116779	125355	117222	117588	136238		
	120746	122665	118958				121042	5.490
170 4,4'-DDT	75410	82973	88154	98505	95255	96064		
	96717	98164	91097				91371	8.639
171 Endrin Aldehyde	85900	83556	87602	82140	79242	89990		
	*****	80494	77098				83253	5.260
172 Endo.sulfate	87100	87378	90424	82139	80695	91715		
	80411	82503	76009				84264	6.146

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphilip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	25.000	30.000	40.000					
	Level 7	Level 8	Level 9					
173 Methoxychlor	32409	35676	41127	40380	34562	33418		
	32648	31614	22967				33867	15.714
174 Endin Ketone	100487	100276	106674	93677	91658	103644		
	91310	94731	83841				96255	7.400
176 Technical Chlordane(1)	9800	7456	7205	6531	6435	6578		
	6749	+++++	+++++				7251	16.348
(2)	18031	14599	14566	13487	13144	13610		
	14494	+++++	+++++				14562	11.253
(3)	22756	20057	19900	18561	18039	19114		
	20366	+++++	+++++				19828	7.769
(4)	39276	34013	34654	33547	32861	34942		
	37060	+++++	+++++				35193	6.358
(5)	9819	8635	9055	7287	7494	8278		
	7699	+++++	+++++				8324	10.993
177 Toxaphene(1)	3378	3754	3760	3649	4044	3693		
	3773	+++++	+++++				3721	5.300
(2)	4396	5014	4575	4223	4929	4741		
	5001	+++++	+++++				4697	6.611
(3)	5509	6581	5704	5919	6859	6469		
	6355	+++++	+++++				6199	8.008
(4)	2335	2883	2394	2485	2887	2603		
	2633	+++++	+++++				2603	8.446
(5)	2314	2549	2181	2155	2513	2323		
	2229	+++++	+++++				2323	6.677

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphilip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6		
\$ 151 CNBT	25.000	30.000	40.000					
	Level 7	Level 8	Level 9					
\$ 152 TCMX	99326	92262	90901	89356	94829	97756		
	93206	96116	91231				93887	3.573
\$ 175 DCBP	52518	54191	75753	64557	50580	+++++		
	+++++	+++++	+++++				59520	17.745

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20069.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 01:20
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	MIN	MAX
	%D	%D		
\$ 151 CNBT	80880.331	90631.267	0.010	-12.1 15.0
\$ 152 TCMX	112573.452	120358.133	0.010	-6.9 15.0
153 Hexachlorobenzene	278153.544	285968.800	0.010	-2.8 15.0
154 alpha-BHC	298590.543	325571.533	0.010	-9.0 15.0
155 gamma-BHC	252263.305	269993.333	0.010	-7.0 15.0
157 Heptachlor	261086.137	275627.733	0.010	-5.6 15.0
163 Endosulfan I	182542.412	176404.400	0.010	3.4 15.0
165 Dieldrin	183632.489	184185.467	0.010	-0.3 15.0
166 Endrin	120747.860	112940.033	0.010	6.5 15.0
167 4,4'-DDD	116613.404	112348.233	0.010	3.7 15.0
170 4,4'-DDT	101758.589	106107.033	0.010	-4.3 15.0
173 Methoxychlor	32278.130	28432.333	0.010	11.9 15.0

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20070.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 01:56
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX
177 Toxaphene(1)	3832.800	4208.960	0.010	-9.8	15.0	
(2)	4617.095	4507.330	0.010	2.4	15.0	
(3)	6051.539	6301.530	0.010	-4.1	15.0	
(4)	2530.998	2359.095	0.010	6.8	15.0	
(5)	2354.760	2507.195	0.010	-6.5	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20071.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 02:31
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX
176 Technical Chlordane(1)	7660.558	7072.090	0.010	7.7	15.0	
(2)	15494.269	15329.700	0.010	1.1	15.0	
(3)	20536.035	18652.310	0.010	9.2	15.0	
(4)	35703.716	34893.085	0.010	2.3	15.0	
(5)	7992.742	7220.060	0.010	9.7	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20072.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 03:07
Init. Calibration Date(s): 10/05/99 11/08/00
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	MIN	MAX
		RRF	%D	%D
150 Hexachlorocyclopentadiene	225776.272	216763.467	0.010	4.0 15.0
156 beta-BHC	132617.714	115984.867	0.010	12.5 15.0
158 delta-BHC	271281.842	260069.800	0.010	4.1 15.0
159 Aldrin	254201.736	258670.800	0.010	-1.8 15.0
160 Hept.epoxide	183174.524	174639.667	0.010	4.7 15.0
161 g-Chlordane	194475.940	178415.733	0.010	8.3 15.0
162 a-Chlordane	162443.268	152813.133	0.010	5.9 15.0
164 4,4'-DDE	167514.339	167792.733	0.010	-0.2 15.0
168 Endosulfan II	129481.158	121000.667	0.010	6.5 15.0
171 Endrin Aldehyde	89731.127	78952.433	0.010	12.0 15.0
172 Endo.sulfate	88082.750	78827.767	0.010	10.5 15.0
174 Endrin Ketone	106454.176	105244.733	0.010	1.1 15.0
\$ 175 DCBP	87177.333	39504.633	0.010	54.7 15.0 <-

CT&E Environmental Services Inc
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20084.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 10:12
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	MAX	%D	%D
\$ 151 CNBT	80880.331	84793.867	0.010	-4.8	15.0		
\$ 152 TCMX	112573.452	107970.467	0.010	4.1	15.0		
153 Hexachlorobenzene	278153.544	260985.000	0.010	6.2	15.0		
154 alpha-BHC	298590.543	288270.600	0.010	3.5	15.0		
155 gamma-BHC	252263.305	245594.533	0.010	2.6	15.0		
157 Heptachlor	261086.137	241622.133	0.010	7.5	15.0		
163 Endosulfan I	182542.412	166051.867	0.010	9.0	15.0		
165 Dieldrin	183632.489	173192.367	0.010	5.7	15.0		
166 Endrin	120747.860	106026.933	0.010	12.2	15.0		
167 4,4'-DDD	116613.404	110622.767	0.010	5.1	15.0		
170 4,4'-DDT	101758.589	95925.300	0.010	5.7	15.0		
173 Methoxychlor	32278.130	28424.300	0.010	11.9	15.0		

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20085.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 10:47
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	MIN	MAX
		RRF	%D	%D
177 Toxaphene(1)	3832.800	4232.855	0.010	-10.4 15.0
(2)	4617.095	5221.165	0.010	-13.1 15.0
(3)	6051.539	5946.220	0.010	1.7 15.0
(4)	2530.998	2620.625	0.010	-3.5 15.0
(5)	2354.760	2320.310	0.010	1.5 15.0

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20086.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 11:22
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX
176 Technical Chlordane(1)	7660.558	7074.310	0.010	7.7	15.0	
(2)	15494.269	15524.945	0.010	-0.2	15.0	
(3)	20536.035	19386.205	0.010	5.6	15.0	
(4)	35703.716	35975.270	0.010	-0.8	15.0	
(5)	7992.742	7492.510	0.010	6.3	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20087.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 22-NOV-2000 11:58
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	%D	%D
150 Hexachlorocyclopentadiene	225776.272	241523.933	0.010	-7.0	15.0
156 beta-BHC	132617.714	115850.667	0.010	12.6	15.0
158 delta-BHC	271281.842	244109.667	0.010	10.0	15.0
159 Aldrin	254201.736	277800.667	0.010	-9.3	15.0
160 Hept.epoxide	183174.524	187757.667	0.010	-2.5	15.0
161 g-Chlordane	194475.940	189318.600	0.010	2.7	15.0
162 a-Chlordane	162443.268	168383.000	0.010	-3.7	15.0
164 4,4'-DDE	167514.339	163564.867	0.010	2.4	15.0
168 Endosulfan II	129481.158	118944.433	0.010	8.1	15.0
171 Endrin Aldehyde	89731.127	83121.167	0.010	7.4	15.0
172 Endo.sulfate	88082.750	84064.300	0.010	4.6	15.0
174 Endin Ketone	106454.176	102681.100	0.010	3.5	15.0
\$ 175 DCBP	87177.333	102681.100	0.010	-17.8	15.0

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20103.d
Analysis Type: LIQUID
Lab Sample ID: cal
Quant Type: ESTD

Injection Date: 22-NOV-2000 21:36
Init. Calibration Date(s): 10/05/99 11/08/00
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX
\$ 151 CNBT	80880.331	88323.600	0.010	-9.2	15.0	
\$ 152 TCMX	112573.452	112135.733	0.010	0.4	15.0	
153 Hexachlorobenzene	278153.544	278780.467	0.010	-0.2	15.0	
154 alpha-BHC	298590.543	324540.733	0.010	-8.7	15.0	
155 gamma-BHC	252263.305	250099.733	0.010	0.9	15.0	
157 Heptachlor	261086.137	272991.933	0.010	-4.6	15.0	
163 Endosulfan I	182542.412	161326.733	0.010	11.6	15.0	
165 Dieldrin	183632.489	167800.800	0.010	8.6	15.0	
166 Endrin	120747.860	105918.900	0.010	12.3	15.0	
167 4,4'-DDD	116613.404	104390.933	0.010	10.5	15.0	
170 4,4'-DDT	101758.589	95896.800	0.010	5.8	15.0	
173 Methoxychlor	32278.130	28590.733	0.010	11.4	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20104.d
Analysis Type: LIQUID
Lab Sample ID: ccal
Quant Type: ESTD

Injection Date: 22-NOV-2000 22:12
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8081/

COMPOUND	RRF	RF15	MIN	%D	MAX
177 Toxaphene(1)	3832.800	3896.280	0.010	-1.7	15.0
(2)	4617.095	4371.450	0.010	5.3	15.0
(3)	6051.539	6377.905	0.010	-5.4	15.0
(4)	2530.998	2201.755	0.010	13.0	15.0
(5)	2354.760	2057.905	0.010	12.6	15.0

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20105.d
Analysis Type: LIQUID
Lab Sample ID: ccal
Quant Type: ESTD

Injection Date: 22-NOV-2000 22:47
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX
176 Technical Chlordane(1)	7660.558	6968.300	0.010	9.0	15.0	
(2)	15494.269	15123.190	0.010	2.4	15.0	
(3)	20536.035	18181.455	0.010	11.5	15.0	
(4)	35703.716	33663.335	0.010	5.7	15.0	
(5)	7992.742	7374.465	0.010	7.7	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k20106.d
Analysis Type: LIQUID
Lab Sample ID: ccal
Quant Type: ESTD

Injection Date: 22-NOV-2000 23:23
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX	%D
150 Hexachlorocyclopentadiene	225776.272	252419.000	0.010	-11.8	15.0		
156 beta-BHC	132617.714	123487.400	0.010	6.9	15.0		
158 delta-BHC	271281.842	292546.533	0.010	-7.8	15.0		
159 Aldrin	254201.736	278929.133	0.010	-9.7	15.0		
160 Hept.epoxide	183174.524	193935.133	0.010	-5.9	15.0		
161 g-Chlordane	194475.940	198140.800	0.010	-1.9	15.0		
162 a-Chlordane	162443.268	173393.733	0.010	-6.7	15.0		
164 4,4'-DDE	167514.339	167075.633	0.010	0.3	15.0		
168 Endosulfan II	129481.158	119802.967	0.010	7.5	15.0		
171 Endrin Aldehyde	89731.127	86410.167	0.010	3.7	15.0		
172 Endo.sulfate	88082.750	78828.767	0.010	10.5	15.0		
174 Endin Ketone	106454.176	94018.800	0.010	11.7	15.0		
\$ 175 DCBP	87177.333	15788.000	0.010	81.9	15.0	<-	

01/29/01 10:03

Form 14
CTEES: Charleston Batch Log

Batch Number: 32793 Type: X On: 11/21/00 By: dam Prep Method: XOX-3510BPST Instrument:

331

Posted and Certified On: 11/28/00 By: sgm Signed: _____

Lab Number	Type Notes	PG Group	Date	Time	By	Dil	Fact	DT
TA0-K0-P323-035	L	PST-T-8081-001	11/21/00	12:00	AR		1.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P323-036	LMS	PST-T-8081-001-LMS					1.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P357-007	L	PST-T-8081-001					1.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P357-008	LMS	PST-T-8081-001-LMS					1.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P357-010	L	PST-T-8081-001					1.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P357-011	LMS	PST-T-8081-001-LMS					1.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P353-003	L	PST-T-8081-001					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P353-004	L	PST-T-8081-001					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P367-002	L	PST-T-8081-001					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P367-003	LMS	PST-T-8081-001-LMS					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P367-005	L	PST-T-8081-001					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-X001-668	MB	PST-T-8081-001-MB					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P367-007	L	PST-T-8081-001					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		
TA0-K0-P367-008	LMS	PST-T-8081-001-LMS					0.00	
		S: 200.0000 ml		E: 5.0000	ml	P:		

Received prepared samples for analysis Signed: _____

Data File: 8k20074.d
 Report Date: 20-Dec-2000 16:38

Page 1

CT&E Environmental Services Inc

SEMI-VOLATILE REPORT (SW8081)

Data file : /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/8k20-2.b/8k20074.d
 Lab Smp Id: 0K0X001668 Client Smp ID: EBK21
 Inj Date : 22-NOV-2000 04:18
 Operator : tep Inst ID: gc8.i
 Smp Info : EBK21 1/10 200>5
 Misc Info :
 Comment : CHANNEL B
 Method : /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/8k20-2.b/gc8_sw8081_chb.m
 Meth Date : 20-Dec-2000 16:38 tphilip Quant Type: ESTD
 Cal Date : 25-AUG-2000 20:38 Cal File: 8h25007.d
 Als bottle: 1 QC Sample: BLANK
 Dil Factor: 10.00000
 Integrator: HP Genie Compound Sublist: PST-T-8081.sub
 Target Version: 3.40
 Processing Host: ctegc1

Concentration Formula: Amt * DF * (Vf/Vi)*(Cf/Ci)

Name	Value	Description
DF	10.000	Dilution Factor
Vf	5.000	Final volume (mls)
Vi	200.000	Initial volume
Cf	1.000	Cleanup(final volume,mls)
Ci	1.000	Cleanup(intial volume,mls)

CONCENTRATIONS

Compounds	RT	EXP RT	DLT RT	RESPONSE	(ug/L)	FINAL
161 g-Chlordane				Compound Not Detected.		
162 a-Chlordane				Compound Not Detected.		
M 192 a,g-Chlordane (sum)				Compound Not Detected.		
166 Endrin				Compound Not Detected.		
157 Heptachlor				Compound Not Detected.		
160 Hept. epoxide				Compound Not Detected.		
155 gamma-BHC				Compound Not Detected.		
173 Methoxychlor				Compound Not Detected.		
176 Technical Chlordane				Compound Not Detected.		
177 Toxaphene				Compound Not Detected.		
\$ 152 TCMX	8.500	8.506	-0.006	1252602	11.1270	2.78 (aM)
\$ 175 DCBP	20.103	20.121	-0.018	541316	6.20937	1.55 (aRM)

CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: 8k20-2
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: OK0X001668 Client Smp ID: EBK21
Level: LOW Operator: tep
Data Type: GC MULTI COMP SampleType: BLANK
SpikeList File: llpest.spk Quant Type: ESTD
Sublist File: PST-T-8081.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/8k20-2.b/gc8_sw8081_chb.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 152 TCMX	5.00	2.78	55.63	40-130
\$ 175 DCBP	5.00	1.55	31.05*	40-130

Data File: 8k20074.d
Report Date: 20-Dec-2000 16:38

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CT&E Environmental Services Inc

TARGET COMPOUNDS

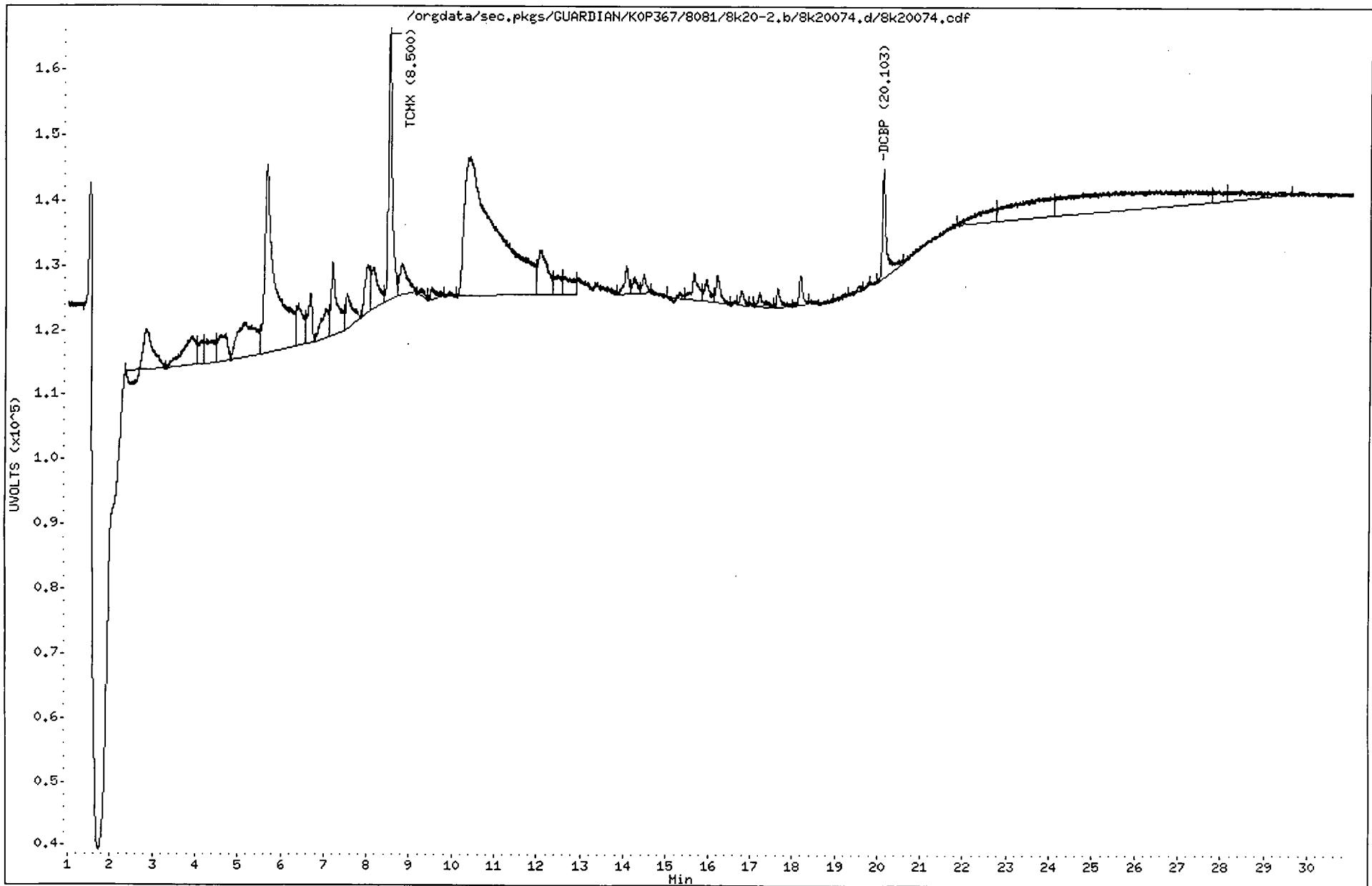
Client Name: Client SDG: 8k20-2
Lab Smp Id: OK0X001668 Client Smp ID: EBK21
Sample Location: Sample Point:
Sample Date: Date Received:
Sample Matrix: WATER Quant Type: ESTD
Analysis Type: SV Level: LOW
Data Type: GC MULTI COMP Operator: tep
Misc Info:

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG) ug/L	Q
00877-09-8	TCMX	2.78	J
02051-24-3	DCBP	1.55	J

Data File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8081/8k20-2.b/8k20074.d
Date : 22-NOV-2000 04:18
Client ID: EBK21
Sample Info: EBK21 1/10 200>5
Volume Injected (uL): 200.0
Column phase: Rtx-CLP Pesticide

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Instrument: gc8.i

Operator: tew
Column diameter: 0.32

Data File: 8k20100.d
 Report Date: 20-Dec-2000 16:39

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CT&E Environmental Services Inc

RECOVERY REPORT

Client Name:
 Sample Matrix: LIQUID
 Lab Smp Id: OKOP367003
 Level: LOW
 Data Type: GC MULTI COMP
 SpikeList File: PST-T-8081.spk
 Sublist File: PST-T-8081.sub
 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/8k20-2.b/gc8_sw8081_chb.m
 Misc Info:

Client SDG: 8k20-2
 Fraction: SV
 Client Smp ID: 367-3MS
 Operator: tep
 SampleType: MS
 Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
161 g-Chlordane	5.00	4.75	95.06	40-130
162 a-Chlordane	5.00	5.64	112.79	40-130
M 192 a,g-Chlordane (sum)	10.0	10.4	103.93	40-130
166 Endrin	5.00	5.00	99.95	40-130
157 Heptachlor	5.00	4.25	85.03	40-130
160 Hept.epoxide	5.00	5.12	102.49	40-130
155 gamma-BHC	5.00	6.47	129.47	40-130
173 Methoxychlor	50.0	36.7	73.35	40-130
177 Toxaphene	50.0	24.6	49.15	40-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 152 TCMX	5.00	4.05	81.04	40-130
\$ 175 DCBP	5.00	1.50	30.05*	40-130

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

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Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 8K20-2

	EPA SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	EBK21	56	31D							0
02	367-2	73	22D							0
03	367-3MS	81	30D							0
04	367-5	88	41							0
05										
06										

S1 = TCMX
S2 = DCBP

QC LIMITS
(40-130)
(40-130)

Column to be used to flag recovery values
* Values outside of contract required QC limits
D Surrogate diluted out

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphilip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	-----	-----	-----	-----	-----	-----	-----		
	25.000	30.000	40.000	—	—	—	—		
Level 7	Level 8	Level 9	—	—	—	—	—	—	—
153 Hexachlorobenzene	247169	230713	232826	233318	231775	247800	—	—	—
	241604	254979	249956	—	—	—	241127	3.815	—
154 alpha-BHC	259400	244937	252308	248882	245814	261120	—	—	—
	256690	283409	280890	—	—	—	259272	5.460	—
155 gamma-BHC	220310	214142	206777	216692	215968	232911	—	—	—
	215136	244208	243785	—	—	—	223326	6.088	—
156 beta-BHC	73351	80040	96921	83508	79600	84366	—	—	—
	76812	75876	70465	—	—	—	80104	9.670	—
157 Heptachlor	249160	215645	228241	224346	224896	239680	—	—	—
	228286	249145	250501	—	—	—	234433	5.522	—
158 delta-BHC	208940	202499	222657	211122	210266	242812	—	—	—
	222770	228863	223370	—	—	—	219255	5.637	—
159 Aldrin	184432	188260	195305	192216	193243	223336	—	—	—
	204833	209892	207059	—	—	—	199842	6.189	—
160 Hept.epoxide	168410	171044	173099	167780	168063	190314	—	—	—
	171877	176522	169475	—	—	—	172954	4.100	—
161 g-Chlordane	191037	201005	188589	174961	173262	199955	—	—	—
	178873	182924	175391	—	—	—	185111	5.736	—
162 a-Chlordane	148914	155388	157829	151206	149479	171530	—	—	—
	154124	151477	147454	—	—	—	154156	4.739	—

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphilip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	—	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	RRF	
	25.000	30.000	40.000					
	Level 7	Level 8	Level 9					
163 Endosulfan I	160104	155244	160305	161112	156613	165679		
	162897	167491	166670				161791	2.657
164 4,4'-DDE	147379	153068	155542	160286	155721	185551		
	169173	169806	165399				162436	7.068
165 Dieldrin	156609	159477	161963	167810	165546	175996		
	174253	182809	188893				170373	6.406
166 Endrin	100517	102543	103633	108660	102160	107647		
	107541	110944	113434				106342	4.115
167 4,4'-DDD	119580	121697	130335	130849	127706	132339		
	129624	132929	130584				128405	3.645
168 Endosulfan II	113829	116779	125355	117222	117588	136238		
	120746	122665	118958				121042	5.490
170 4,4'-DDT	75410	82973	88154	98505	95255	96064		
	96717	98164	91097				91371	8.639
171 Endrin Aldehyde	85900	83556	87602	82140	79242	89990		
	+++++	80494	77098				83253	5.260
172 Endo.sulfate	87100	87378	90424	82139	80695	91715		
	80411	82503	76009				84264	6.146

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphillip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	---	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	----		
	25.000	30.000	40.000						
	Level 7	Level 8	Level 9						
173 Methoxychlor	32409	35676	41127	40380	34562	33418			
	32648	31614	22967					33867	15.714
174 Endin Ketone	100487	100276	106674	93677	91658	103644			
	91310	94731	83841					96255	7.400
176 Technical Chlordane(1)	9800	7456	7205	6531	6435	6578			
	6749	+++++	+++++					7251	16.348
(2)	18031	14599	14566	13487	13144	13610			
	14494	+++++	+++++					14562	11.253
(3)	22756	20057	19900	18561	18039	19114			
	20366	+++++	+++++					19828	7.769
(4)	39276	34013	34654	33547	32861	34942			
	37060	+++++	+++++					35193	6.358
(5)	9819	8635	9055	7287	7494	8278			
	7699	+++++	+++++					8324	10.993
177 Toxaphene(1)	3378	3754	3760	3649	4044	3693			
	3773	+++++	+++++					3721	5.300
(2)	4396	5014	4575	4223	4929	4741			
	5001	+++++	+++++					4697	6.611
(3)	5509	6581	5704	5919	6859	6469			
	6355	+++++	+++++					6199	8.008
(4)	2335	2883	2394	2485	2887	2603			
	2633	+++++	+++++					2603	8.446
(5)	2314	2549	2181	2155	2513	2323			
	2229	+++++	+++++					2323	6.677

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 05-OCT-1999 02:31
 End Cal Date : 19-OCT-2000 13:09
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc8.i/8j18-2.b/gc8_sw8081_chb.m
 Cal Date : 19-Oct-2000 15:56 tphilip
 Curve Type : Average

Compound	3.000	4.000	5.000	10.000	15.000	20.000	—	RRF	% RSD
	Level 1	Level 2	Level 3	Level 4	Level 5	Level 6	—		
	25.000	30.000	40.000						
	Level 7	Level 8	Level 9						
\$ 151 CNBT	73588	65524	57374	52460	63131	68061			
	64147	66491	63248					63780	9.520
\$ 152 TCMX	99326	92262	90901	89356	94829	97756			
	93206	96116	91231					93887	3.573
\$ 175 DCBP	52518	54191	75753	64557	50580	*****			
	*****	*****	*****					59520	17.745

Data File: 8k27029.d

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Report Date: 20-Dec-2000 16:42

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i

Injection Date: 28-NOV-2000 03:53

Lab File ID: 8k27029.d

Init. Calibration Date(s): 10/05/99 11/08/0

Analysis Type: LIQUID

Init. Calibration Times: 02:31 17:20

Lab Sample ID: CCAL

Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

Quant Type: ESTD

COMPOUND	RRF	RF15	MIN	MAX
			%D	%D
\$ 151 CNBT	80880.331	81973.533	0.010	-1.4 15.0
\$ 152 TCMX	112573.452	109562.267	0.010	2.7 15.0
153 Hexachlorobenzene	278153.544	268265.400	0.010	3.6 15.0
154 alpha-BHC	298590.543	304365.933	0.010	-1.9 15.0
155 gamma-BHC	252263.305	264179.800	0.010	-4.7 15.0
157 Heptachlor	261086.137	272185.067	0.010	-4.3 15.0
163 Endosulfan I	182542.412	170861.933	0.010	6.4 15.0
165 Dieldrin	183632.489	168890.900	0.010	8.0 15.0
166 Endrin	120747.860	105259.433	0.010	12.8 15.0
167 4,4'-DDD	116613.404	110136.700	0.010	5.6 15.0
170 4,4'-DDT	101758.589	92106.833	0.010	9.5 15.0
173 Methoxychlor	32278.130	31390.893	0.010	2.7 15.0

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i Injection Date: 28-NOV-2000 04:29
Lab File ID: 8k27030.d Init. Calibration Date(s): 10/05/99 11/08/0
Analysis Type: LIQUID Init. Calibration Times: 02:31 17:20
Lab Sample ID: CCAL Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/
Quant Type: ESTD

COMPOUND	RRF	RF15	MIN	%D	MAX
177 Toxaphene(1)	3832.800	3868.480	0.010	-0.9	15.0
(2)	4617.095	4000.205	0.010	13.4	15.0
(3)	6051.539	5345.035	0.010	11.7	15.0
(4)	2530.998	2904.205	0.010	-14.7	15.0
(5)	2354.760	2413.930	0.010	-2.5	15.0

Data File: 8k27031.d

Report Date: 20-Dec-2000 16:42

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CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i

Injection Date: 28-NOV-2000 05:04

Lab File ID: 8k27031.d

Init. Calibration Date(s): 10/05/99 11/08/0

Analysis Type: LIQUID

Init. Calibration Times: 02:31 17:20

Lab Sample ID: CCAL

Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

Quant Type: ESTD

COMPOUND	RRP	RF15	RRF	%D	%D
176 Technical Chlordane(1)	7660.558	7133.560	0.010	6.9	15.0
(2)	15494.269	14754.810	0.010	4.8	15.0
(3)	20536.035	20607.280	0.010	-0.3	15.0
(4)	35703.716	34493.565	0.010	3.4	15.0
(5)	7992.742	7550.735	0.010	5.5	15.0

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k27032.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 28-NOV-2000 05:39
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	%D	%D
150 Hexachlorocyclopentadiene	225776.272	240285.600	0.010	-6.4	15.0
156 beta-BHC	132617.714	117658.800	0.010	11.3	15.0
158 delta-BHC	271281.842	252574.067	0.010	6.9	15.0
159 Aldrin	254201.736	260705.000	0.010	-2.6	15.0
160 Hept.epoxide	183174.524	183521.133	0.010	-0.2	15.0
161 g-Chlordane	194475.940	185042.267	0.010	4.9	15.0
162 a-Chlordane	162443.268	165450.667	0.010	-1.9	15.0
164 4,4'-DDE	167514.339	169204.800	0.010	-1.0	15.0
168 Endosulfan II	129481.158	118537.200	0.010	8.5	15.0
171 Endrin Aldehyde	89731.127	78395.567	0.010	12.6	15.0
172 Endo.sulfate	88082.750	82521.767	0.010	6.3	15.0
174 Endin Ketone	106454.176	93124.133	0.010	12.5	15.0
\$ 175 DCBP	87177.333	++++	0.010	++++	15.0 <-

Data File: 8k27048.d

Report Date: 20-Dec-2000 16:43

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CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
 Lab File ID: 8k27048.d
 Analysis Type: LIQUID
 Lab Sample ID: CCAL
 Quant Type: ESTD

Injection Date: 28-NOV-2000 15:09
 Init. Calibration Date(s): 10/05/99 11/08/00
 Init. Calibration Times: 02:31 17:20
 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	MAX	%D	%D
\$ 151 CNBT	80880.331	82763.000	0.010	-2.3	15.0		
\$ 152 TCMX	112573.452	117067.600	0.010	-4.0	15.0		
153 Hexachlorobenzene	278153.544	291257.267	0.010	-4.7	15.0		
154 alpha-BHC	298590.543	303064.667	0.010	-1.5	15.0		
155 gamma-BHC	252263.305	279599.933	0.010	-10.8	15.0		
157 Heptachlor	261086.137	283148.067	0.010	-8.5	15.0		
163 Endosulfan I	182542.412	179427.933	0.010	1.7	15.0		
165 Dieldrin	183632.489	189133.633	0.010	-3.0	15.0		
166 Endrin	120747.860	129580.667	0.010	-7.3	15.0		
167 4,4'-DDD	116613.404	102468.467	0.010	12.1	15.0		
170 4,4'-DDT	101758.589	103531.100	0.010	-1.7	15.0		
173 Methoxychlor	32278.130	33137.867	0.010	-2.7	15.0		

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k27049.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 28-NOV-2000 15:44
Init. Calibration Date(s): 10/05/99 11/08/0
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	MIN	%D	MAX
177 Toxaphene (1)	3832.800	3932.820	0.010	-2.6	15.0	
(2)	4617.095	4473.715	0.010	3.1	15.0	
(3)	6051.539	6211.245	0.010	-2.6	15.0	
(4)	2530.998	2653.050	0.010	-4.8	15.0	
(5)	2354.760	2619.645	0.010	-11.2	15.0	

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
Lab File ID: 8k27050.d
Analysis Type: LIQUID
Lab Sample ID: CCAL
Quant Type: ESTD

Injection Date: 28-NOV-2000 16:21
Init. Calibration Date(s): 10/05/99 11/08/00
Init. Calibration Times: 02:31 17:20
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	%D	%D
176 Technical Chlordane(1)	7660.558	7351.025	0.010	4.0	15.0
(2)	15494.269	15100.950	0.010	2.5	15.0
(3)	20536.035	18910.645	0.010	7.9	15.0
(4)	35703.716	31795.080	0.010	10.9	15.0
(5)	7992.742	7558.910	0.010	5.4	15.0

Data File: 8k27051.d

Report Date: 20-Dec-2000 16:43

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CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc8.i
 Lab File ID: 8k27051.d
 Analysis Type: LIQUID
 Lab Sample ID: CCAL
 Quant Type: ESTD

Injection Date: 28-NOV-2000 16:57
 Init. Calibration Date(s): 10/05/99 11/08/0
 Init. Calibration Times: 02:31 17:20
 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/

COMPOUND	RRF	RF15	RRF	%D	%D	MIN	MAX
150 Hexachlorocyclopentadiene	225776.272	241821.200	0.010	-7.1	15.0		
156 beta-BHC	132617.714	118493.400	0.010	10.7	15.0		
158 delta-BHC	271281.842	254934.000	0.010	6.0	15.0		
159 Aldrin	254201.736	284567.600	0.010	-11.9	15.0		
160 Hept.epoxide	183174.524	193714.600	0.010	-5.8	15.0		
161 g-Chlordane	194475.940	196203.600	0.010	-0.9	15.0		
162 a-Chlordane	162443.268	173030.667	0.010	-6.5	15.0		
164 4,4'-DDE	167514.339	177869.733	0.010	-6.2	15.0		
168 Endosulfan II	129481.158	122647.000	0.010	5.3	15.0		
171 Endrin Aldehyde	89731.127	85983.067	0.010	4.2	15.0		
172 Endo.sulfate	88082.750	84066.600	0.010	4.6	15.0		
174 Endin Ketone	106454.176	95153.267	0.010	10.6	15.0		
\$ 175 DCBP	87177.333	43727.833	0.010	49.8	15.0	<-	

Data File: 8k27042.d
 Report Date: 20-Dec-2000 16:42

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CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: 8k27-2
 Sample Matrix: LIQUID Fraction: SV
 Lab Smp Id: OKOP367008 Client Smp ID: 367-8ms
 Level: LOW Operator: tep
 Data Type: GC MULTI COMP SampleType: MS
 SpikeList File: PST-T-8081.spk Quant Type: ESTD
 Sublist File: PST-T-8081.sub
 Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8081/8k27-2.b/gc8_sw8081_chb.m
 Misc Info:

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
161 g-Chlordane	1.25	0.000	*	40-130
162 a-Chlordane	1.25	0.000	*	40-130
M 192 a,g-Chlordane (sum)	2.50	0.000	*	40-130
166 Endrin	1.25	0.000	*	40-130
157 Heptachlor	1.25	0.000	*	40-130
160 Hept.epoxide	1.25	0.000	*	40-130
155 gamma-BHC	1.25	0.000	*	40-130
173 Methoxychlor	12.5	0.000	*	40-130
177 Toxaphene	12.5	0.000	*	40-130

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 152 TCMX	1.25	0.000	*	40-130
\$ 175 DCBP	1.25	0.000	*	40-130

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

C-351

Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 8K27-2

EPA SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01 367-7	OD	OD							0
02 367-8MS	OD	OD							0
03									
04									
05									
06									
07									
08									
09									
10									
11									
12									
13									
14									
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QC LIMITS

S1 = TCMX (40-130)
S2 = DCBP (40-130)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out

CT&E Environmental Services Inc

INITIAL CALIBRATION DATA

Start Cal Date : 11-FEB-1999 14:11
 End Cal Date : 20-NOV-2000 21:39
 Quant Method : ESTD
 Origin : Disabled
 Target Version : 3.40
 Integrator : HP Genie
 Method file : /chem/gc6.i/6k20-1.b/herb_chA.m
 Cal Date : 21-Nov-2000 09:16 tphillip
 Curve Type : Average

Compound	0.00500	0.00800	0.01000	0.02000	0.03000	0.05000	—	RRF	% RSD
	Level 1 Level 2 Level 3 Level 4 Level 5 Level 6								
	----- ----- ----- ----- ----- -----								
	0.07500 0.10000								
	Level 7 Level 8								
7 2,4-D	19789100 18106733 18126050 15567733 15683450 20583620								
	18127988 19036610						18127660	9.812	
8 Pentachlorophenol	353795000 380415125 428925800 480960900 529650200 570300600								
	508235920 454666600						463368768	15.963	
9 2,4,5-TP(Silvex)	160058400 139708400 113789350 114695167 126366575 165372160								
	155418812 162835220						142280511	15.207	
10 2,4,5-T	88213900 82168267 70761800 74929900 80715925 100366260								
	88894012 85575370						83953179	10.877	
\$ 4 2,4-DAA	17772600 16411200 13569150 14575767 15730775 18833540								
	15662900 16170160						16090762	10.353	

Data File: 6k20027.d

Report Date: 20-Dec-2000 16:49

CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc6.i

Injection Date: 21-NOV-2000 12:08

Lab File ID: 6k20027.d

Init. Calibration Date(s): 02/11/99 11/20/0

Analysis Type: WATER

Init. Calibration Times: 14:11 21:39

Lab Sample ID: ccal

Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/

Quant Type: ESTD

COMPOUND	RRF	RFO	RRF	%D	%D
\$ 4 2,4-DAA	16090761.458	15707250.000	0.010	2.4	15.0
7 2,4-D	18127660.521	17535750.000	0.010	3.3	15.0
9 2,4,5-TP(Silvex)	142280510.521	128556050.000	0.010	9.6	15.0
10 2,4,5-T	83953179.271	90340000.000	0.010	-7.6	15.0

CT&E Environmental Services Inc
CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc6.i
Lab File ID: 6k20047.d
Analysis Type: WATER
Lab Sample ID: ccal
Quant Type: ESTD

Injection Date: 22-NOV-2000 04:03
Init. Calibration Date(s): 02/11/99 11/20/0
Init. Calibration Times: 14:11 21:39
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/

COMPOUND	RRF	RFO	RRF	MIN	%D	MAX
\$ 4 2,4-DAA	16090761.458	14988750.000	0.010	6.8	15.0	
7 2,4-D	18127660.521	18124150.000	0.010	0.0	15.0	
9 2,4,5-TP(Silvex)	142280510.521	129013150.000	0.010	9.3	15.0	
10 2,4,5-T	83953179.271	83253200.000	0.010	0.8	15.0	

Data File: 6k20057.d

Report Date: 20-Dec-2000 16:49

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CT&E Environmental Services Inc

CONTINUING CALIBRATION COMPOUNDS

Instrument ID: gc6.i

Injection Date: 22-NOV-2000 12:34

Lab File ID: 6k20057.d

Init. Calibration Date(s): 02/11/99 11/20/0

Analysis Type: WATER

Init. Calibration Times: 14:11 21:39

Lab Sample ID: ccal

Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/

Quant Type: ESTD

COMPOUND	RRF	RFO	RRF	MIN	%D	MAX
\$ 4 2,4-DAA	16090761.458	16638150.000	0.010	-3.4	15.0	
7 2,4-D	18127660.521	19554450.000	0.010	-7.9	15.0	
9 2,4,5-TP(Silvex)	142280510.521	133369850.000	0.010	6.3	15.0	
10 2,4,5-T	83953179.271	84478300.000	0.010	-0.6	15.0	

01/29/01 10:03

Batch Number: 32713 Type: X On: 11/20/00 By: dam Prep Method: XOX-8151HRBT Instrument:

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Posted and Certified On: 11/20/00 By: dam Signed: _____

Lab Number	Type Notes	PG Group	Date	Time	By	Dil Fact	DT
TA0-K0-P353-003	L	HRB-T-8151-001	11/20/00	12:00	AR	1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P353-004	L	HRB-T-8151-001				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P357-007	L	HRB-T-8151-001				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P357-008	LMS	HRB-T-8151-001-LMS				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P357-010	L	HRB-T-8151-001				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P357-011	LMS	HRB-T-8151-001-LMS				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P367-002	L	HRB-T-8151-001				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P367-003	LMS	HRB-T-8151-001-LMS				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P367-005	L	HRB-T-8151-001				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P367-007	L	HRB-T-8151-001				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-P367-008	LMS	HRB-T-8151-001-LMS				1.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	
TA0-K0-X001-613	MB	HRB-T-8151-001-MB				0.00	
		S: 100.0000 ml		E:	5.0000 ml	P:	

Received prepared samples for analysis Signed: _____

Data File: 6k20029.d
Report Date: 20-Dec-2000 16:49

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CT&E Environmental Services Inc

Herbicide Analysis Channel A

Data file : /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/6k20-1.b/6k20029.d
Lab Smp Id: 0K0X001613 Client Smp ID: ebk20
Inj Date : 21-NOV-2000 13:43
Operator : tep Inst ID: gc6.i
Smp Info : ebk20 1/10 100>5
Misc Info :
Comment :
Method : /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/6k20-1.b/herb_chA.m
Meth Date : 20-Dec-2000 16:49 tphilip Quant Type: ESTD
Cal Date : 20-NOV-2000 21:39 Cal File: 6k20010.d
Als bottle: 1 QC Sample: BLANK
Dil Factor: 10.00000
Integrator: HP Genie Compound Sublist: HRB-T-8151.sub
Target Version: 3.40 Sample Matrix: WATER
Processing Host: ctegcl

Concentration Formula: Amt * DF * ((Uf*Vt)/Vo) * (Cf*Ci)

Name	Value	Description
DF	10.000	Dilution Factor
Uf	1000.000	conv. ml->L
Vt	5.000	final volume
Vo	100.000	initial volume
Cf	1.000	cleanup (final volume)
Ci	1.000	cleanup(intial volume)

CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE (ug/ml)	(ug/L)
\$ 4	2,4-DAA			CAS #: 19719-28-9
18.106	18.150	-0.044	710841 0.04418	22.1
7	2,4-D			CAS #: 94-75-7

Compound Not Detected

Data File: 6k20029.d
Report Date: 20-Dec-2000 16:49

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CONCENTRATIONS

ON-COL FINAL

RT	EXP RT	DLT RT	RESPONSE (ug/ml)	(ug/L)
==	=====	=====	=====	=====

9 2,4,5-TP(Silvex) CAS #: 93-72-1

Compound Not Detected

10 2,4,5-T CAS #: 93-76-5

Compound Not Detected

CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: 6k20-1
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: OK0X001613 Client Smp ID: ebk20
Level: LOW Operator: tep
Data Type: GC DATA SampleType: BLANK
SpikeList File: HRB-D-8151.spk Quant Type: ESTD
Sublist File: HRB-T-8151.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/6k20-1.b/herb_chA.m
Misc Info:

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 4 2,4-DAA	20.0	22.1	110.44	40-120

CT&E Environmental Services Inc

TARGET COMPOUNDS

Client Name:
Lab Smp Id: OK0X001613
Sample Location:
Sample Date:
Sample Matrix: WATER
Analysis Type: SV
Data Type: GC DATA
Misc Info:

Client SDG: 6k20-1
Client Smp ID: ebk20
Sample Point:
Date Received:
Quant Type: ESTD
Level: LOW
Operator: tep

CAS NO.	COMPOUND	CONCENTRATION UNITS: (ug/L or ug/KG)	ug/L	Q
---------	----------	---	------	---

=====	19719-28-9 ----- 2, 4-DAA	=====	22.1	=====
-------	---------------------------	-------	------	-------

Data File: /orgdata/sec.pkgs/GUARDIAN/KOP367/8151/6k20-1.b/6k20029.d
Date : 21-NOV-2000 13:43
Client ID: ebk20
Sample Info: ebk20 1/10 100>5
Purge Volume: 100.0
Column phase: DB608 30M

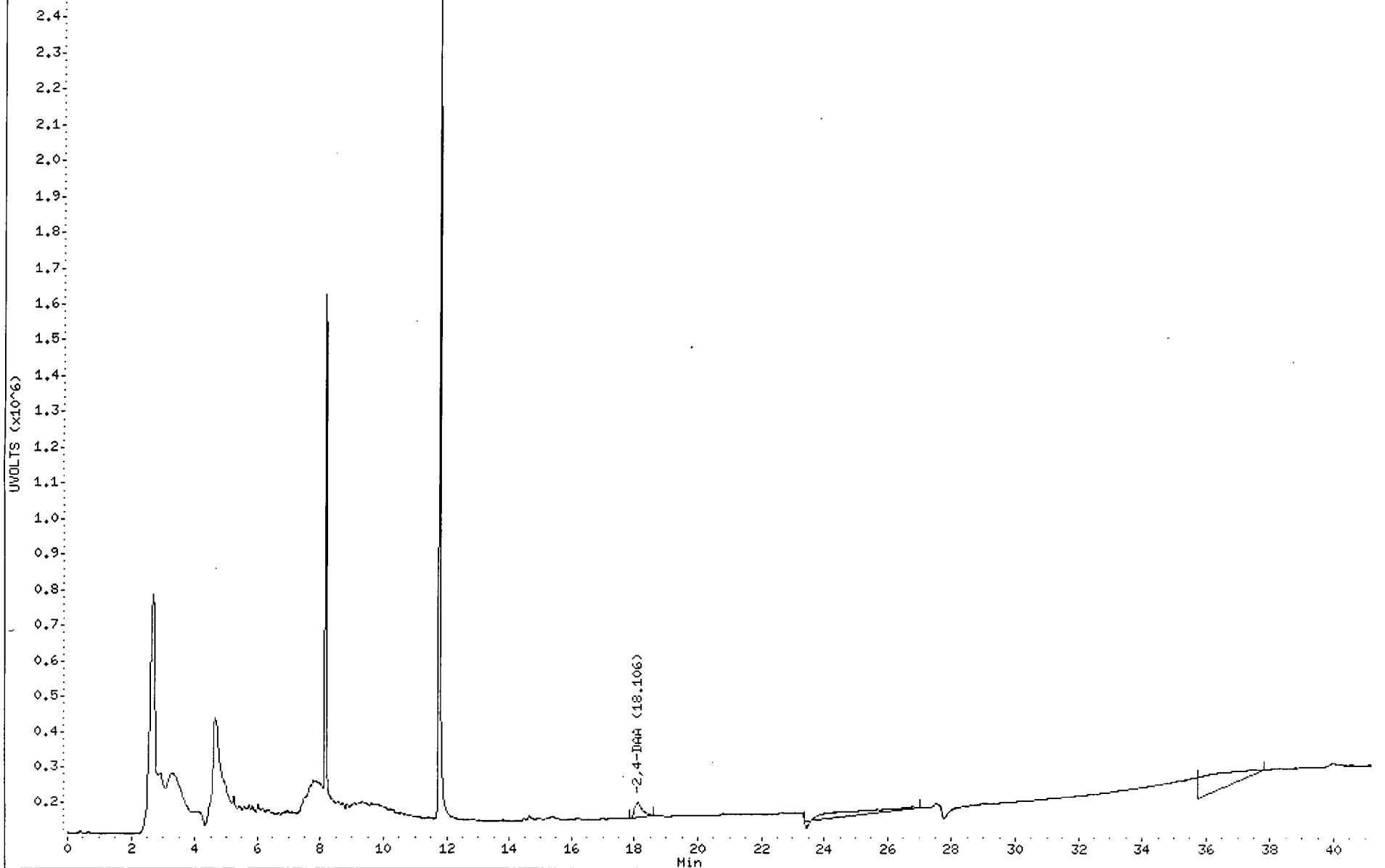
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Instrument: go6.i

Operator: tdp

Column diameter: 0.32

/orgdata/sec.pkgs/GUARDIAN/KOP367/8151/6k20-1.b/6k20029.d/6k20029.cdf



CT&E Environmental Services Inc

RECOVERY REPORT

Client Name: Client SDG: 6k20-1
Sample Matrix: LIQUID Fraction: SV
Lab Smp Id: OKOP367003 Client Smp ID: 367-3MS
Level: LOW Operator: tep
Data Type: GC DATA SampleType: MS
SpikeList File: HRB-T-8151.spk Quant Type: ESTD
Sublist File: HRB-T-8151.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/6k20-1.b/herb_chA.m
Misc Info:

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 2,4-D	20.0	14.8	74.29	40-120
9 2,4,5-TP(Silvex)	20.0	14.5	72.67	40-120
10 2,4,5-T	20.0	17.4	87.06	40-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 4 2,4-DAA	20.0	19.3	96.31	40-120

CT&E Environmental Services Inc

ORIGINIAL

RECOVERY REPORT

Client Name:
Sample Matrix: LIQUID
Lab Smp Id: OKOP367008
Level: LOW
Data Type: GC DATA
SpikeList File: HRB-T-8151.spk
Sublist File: HRB-T-8151.sub
Method File: /orgdata/sec.pkgs/GUARDIAN/K0P367/8151/6k20-1.b/herb_chA.m
Misc Info:

Client SDG: 6k20-1
Fraction: SV
Client Smp ID: 367-8MS
Operator: tep
SampleType: MS
Quant Type: ESTD

SPIKE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
7 2,4-D	2.50	0.000	*	40-120
9 2,4,5-TP (Silvex)	2.50	1.95	78.08	40-120
10 2,4,5-T	2.50	0.000	*	40-120

SURROGATE COMPOUND	CONC ADDED ug/L	CONC RECOVERED ug/L	% RECOVERED	LIMITS
\$ 4 2,4-DAA	2.50	1.61	64.35	40-120

2C
WATER SEMIVOLATILE SURROGATE RECOVERY

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Lab Name: CT&E ENVIRONMENTAL SERVIC Contract: GUARDIAN

Lab Code: K0P367 Case No.: SAS No.: SDG No.: 6K20-1

	EPA SAMPLE NO.	S1 #	S2 #	S3 #	S4 #	S5 #	S6 #	S7 #	S8 #	TOT OUT
01	EBK20	110								0
02	367-2	79								0
03	367-3MS	96								0
04	367-5	112								0
05	367-7	82								0
06	367-8MS	64								0
07										
08										

S1 = 2,4-DAA

QC LIMITS
(40-120)

Column to be used to flag recovery values
 * Values outside of contract required QC limits
 D Surrogate diluted out